

1955

✓ 1955.1 1.5 ms. N. of Big Cabin, Craig Co.,  
Oklahoma. VIII. 4. 1955. Elev. approx. 200 ft.  
(R.). Overcast, after rain, everything  
wet & rain soaked. Roadside made of  
tall grass & weeds, some sunflower. Little  
mowing.

Syrphula - few adults, juvs. numerous.

Melanophus biittatus - 1 taken - all seen.

Ceanothus sp. 1 swept. - all seen.

Orth. 11 = 11

Other vis. 1.

✓ 1955.2 4.5 ms. S. of Chouteau, Mayes Co.,  
Okla. Elev. 530 ft. VIII. 4. 1955. (R.).

Roadside, partly mowed, elsewhere tall  
grass, sunflowers, Andropogon, etc. Very wet,  
not a problem to handle. Wind high - coming  
in from a full storm.

Elapheromera (?) swept - none adult.

Syrphula abundant, partic. juvs. - in thicket com.

Leptodella very few.

Cyanocephalus numerous - in thicket com and

Onychia - few, <sup>on ground</sup>, active.

Chrysocentrus very few, many flying. 1 taken. but 2 seen



Chortophaga few, all seen taken.  
Trachyrhachis very few - very local, all seen  
taken (2). In that cases

Hesperotettix pratensis Very local,  
in or near Andropogon patches.

Melanophus bivittatus Numerous, general  
virtually all adults.

Melanoplus packardii Fyfe - Two 2 taken

Melanoplus parkardi Type - Two 2 taken

Campylorhynchus 1 juv. Fahren - mpt

Plenth.  $57 + 11 = 68$

Other vis.  $0 + 0 = 1$

1955.3 7 ms. S. F. Wagoner, Wagoner Co.  
To Chula. <sup>Cings 500 ft.</sup> Also? Aug. 4, 1955. (R.)

To Chula. <sup>Circa 500 ft.</sup> <sup>Calco.?</sup> Aug. 4, 1955. (R.)

Roadside short grass flanked by  
flooded wood edge. (?) 1 damaged sp. swept.  
*Syrphula* Mod. num. mostly adult.

florid wood etc. 1 damaged sp. swept

*Syrphula* <sup>*Wespa*</sup> <sup>*num.*</sup> mostly adult.

Boopis curvirostris 3 ♂, all seen, taken

In Hunter pass.

Cephus Common, in West pass.

Thymus - a few taken.

Med. literature: - all sent home

Mel. diff. van het brot. } Tetris ijne voert.

Ex.  $22 + 68 = 90$ .

Other way,  $0 + 1 = 1$ .



✓ 1955: 4 3 ms. N. of Keifton, Muskogee  
Co., Okla. Elev. <sup>563 ft.</sup> ~~563 ft.~~ VII. 4, 1955: (R.).

In tall weed & grass.

Amphispiza (?) All juvs.? Numerous,  
mpt.

Syrula adum. mainly juvs. Common.

Agelaius luc. in thicket.

Agelaius pratensis local, six taken.

Melanophaga tristis a number, 3 taken

" sp. 1 ♀. too in thicket.

Corvus str. local. 3 <sup>Taken</sup> juvs. seen.

Orth.  $32 + 90 = 122$ .

Orth. vis.  $0 + 1 = 1$ .

✓ 1955: 5 5 ms. W. of Warner, Muskogee Co.,  
Okla. Elev. <sup>750 ft.</sup> ~~750 ft.~~ VII. 4, 1955: (R.).

Roadside - weed, grass, ditch & wood edge.

Syrula largely adults.

Ceryle alba very few - 1 taken.

Ceryle alba few, very active - 2 taken.

Melanophaga tristis quite few in moister  
areas, very few flying & hard to take  
as they flew across road full of traffic.

Agelaius luc. 1 seen - taken.

Melanophaga tristis numerous, 1 taken.

" diff. a few, 2 taken.

Corvus str. 1 juv. taken.



Sceddaria 1 ♀, swept from tall weeds.  
Conosiph. 1 juv. taken.

Arth.  $17 + 122 = 139$ .

Uther vis.  $0 + 1 = 1$ .

✓ 1955.6 6 mos. W of Sallisaw, Sequoyah  
Co., Okla. <sup>alt. 500 ft.</sup> ~~alt. 500 ft.~~ VIII. 4, 1955. (R.).

Roadside drain - tall weeds.

All <sup>species of</sup> C. seen taken except one large Sceddaria  
- a number of Mermiria which were  
very.

Siphula numerous, mostly ads.

Aphidella " in short grass

Mel. frum-rubrum flav. - 1 taken.

Conosiph. strilus 1 ♂ taken

Arth.  $13 + 139 = 152$ .

Uther vis.  $1 + 1 = 2$

✓ 1955.7 6 mos. S. of Sallisaw, Sequoyah Co.,  
Okla. <sup>alt. 600 ft.</sup> ~~alt. 500 ft.~~ VIII. 5, 1955. (R.) <sup>alt. 200-300 ft. higher than Sallisaw.</sup>

On oak covered hills - roadside, with tall  
and wet vegetation. All specimens taken  
ex sev. Mermiria.

Diaphormus 1 ad ♂ & num. of juvs. swept.

Paratettix 1 swept from damp ground.



1955-7 (cont.)

Mermiria 1 juv. Sydula 1 juv.

Hippiscus a few, 2 taken.

Hadrotettix a few seen, one taken on bare area.

Melanoplus sp. 1 ♂.

" spp. no. juv.

Campylacantha a few juvs.

Not. not numerous.

Orth.  $17 + 152 = 169$

Orth. no.  $0 + 2 = 2$

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1955-8 6 mi. due S. of Arkansas River  
bridge on U.S. 59, Laplace Co., Okla.

Colo. <sup>ca. 450 ft.</sup> VIII. 5. 1955. (R.).

Weedy fields and true sandy areas - tall  
weed in former. All species seen taken  
exc. Chistocerca amer. - Mel. differentialis.

Sydula juvs. only.

Mermiria a fair no. very active - two taken.

Urophylloides num. on bare or short vegetated  
surfaces.

Hadrotettix specimens 1 of all seen.

Campylacantha 2 ad. + num. juvs. Taken.

Melanoplus vittatus a few, 1 taken.

" spp. juvs. of a number rept.



Conusph. stratus no. adults taken,  
mostly juvs.

With.  $28 + 169 = 197$ .

Other ins.  $0 + 2 = 2$

✓ 1955.9 Cavanah R.R. siding, bet. Portau  
and Mister, Leplow Co., Okla. Elev. ? V.M.S. 1955.  
(R.)

Area of tall weeds of various types,  
brass, mullins, etc.

All C. species seen taken, etc.

Elapheromma numerous, all juvs.

Stagmom. 1 juv. kept.

Synchlora num., ad. - juvs.

Mermiria in fair nos. very active

Cephusella a few.

Aphis a few, one taken.

Hadrotettix 1 taken, all seen.

Campylacantha, all seen juvs.

Neurostethis quercus a pair taken

Melanophus diff. abund. no. taken

" brutt. not quite as num.

" femor-nigrum not num.

Conusph. stratus Numerous

With.  $46 + 197 = 243$ .

Other ins.  $0 + 2 = 2$



✓  
1955.10 3 mi. W. of Wister, Ripdon Co., Uthla.  
Elev. <sup>500 ft.</sup> 2. VIII. 5. 1955. (R.).

Open oak and hickory woods.  
All species seen taken.

Syrphula less common than usual.

Mermiria numerous.

Cephus numerous

Aphidius, a few

Hippodamia more along roadside than in woods.

Pentastotus, two seen on dead leaves in woods, 1 lost, 1 taken.

Melanoplus lucidus a fair no., mostly ad.

" tristatus a few.

" sp.? large grayish - 2 ♀ all seen.

" spp. imm. prob. nr. spp.

Ant. 24 + 243 = 267.

Other ins. 0 + 2 = 2.

✓  
1955.11 Betw. Red Oak and Hughes, Rationer Co., Uthla. Elev. <sup>600 ft.</sup> ? VIII. 5. 1955. (R.).

Roadside of heavy oak and hickory woods.

All species seen taken exc. Mel. differentialis.

Asphondylia num. anpt, 1 ad ♂ other immat.

Syrphula num. ads. a few.

Mermiria a few.



Aphidius 1 Taken.  
Aphidius a number, 2 Taken.  
Myrmica ditto - long flying.  
Agrotis a number, very active.  
Campoplex 1 juv. Taken.  
Mel. sp. 1 juv.

With.  $28 + 267 = 295$   
Other ins  $0 + 2 = 2$ .

↓  
1955. 12 8 mi. WSW. of Wilburton,  
Ratner Co., Okla. Elev. ? Area 700 ft.  
VIII. 5. 1955: (R.).

Elevated shoulder of ridge with cut. over  
oak, pine & hickory woods. Ground surface  
in greater part broken flabby rock,  
little low plant cover except oak scrub.  
Remains of burns in places.

All species seen Taken.

Syrphid a few.  
Mermis ditto.

Aphidius "

Agrotis about the rock surface.

Chortophaga a few.

Aphidius numerous.

Agrotis very numerous, particularly  
about the flat rock areas, not as



1955.12 (cont.)

vary as usual.

Cnemidophorus frictus 1 impst.

Utch.  $18 + 295 = 313$ .

Utch. mis.  $0 + 2 = 2$ .

✓ 1955.13 3.2 mo. S. of Savanna, Pittsburg Co.,  
Okla. Elev. (approx.) 660 feet. VIII. 6. 1955. (R.)

Roadside swale of tall grass and weeds,  
with bare spots of gravel and broken  
black top (old road material).

All species seen adult taken exc. 1 ind.

of a th-w. Melanophus, ~~latter~~

Elanoides abundant, in considerable  
part adults, impst.

Syrphula, a few.

Mercuria very active, 4 taken.

Agrostis few on ground, 1 taken.

Hesperistis viridis a single one.

" pratensis, a few, 2 taken.

" speciosa " " , 2 "

Campylacantha juvs. impst.

Melanophus diff. numerous, free flying.

" viridis a number.

" sp.? juv. taken.

Cnemidoph. frictus, ads. with eggs & juvs.



Orth.  $45 + 313 = 358$   
Other ins.  $0 + 2 = 2$

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1955.14 Hill Hopes S. of Gap, Atoka Co.,  
Oklahoma. Elev. 660 ft. (an.) VIII. 6, 1955. (R.)

Tangle of weeds along edge of oak woods on  
in edge of same.

All species seen adult taken exc. Mel.

differentialis. Little variety.

Diapheromera rupt. Juv. also seen.

Syrphula few.

Mermiria, numerous.

Aganotettix a very few. 1 taken

Chortophaga 1 taken, all recognized.

Campoplexanthus Juv. only.

Orth.  $9 + 358 = 367$ .

Other ins.  $0 + 2 = 2$ .

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✓ 1955.15 7.5 ms. S.E. of Atoka, Atoka Co.,  
Okla. Elev 475 feet (an.) VIII. 6, 1955  
(R.)

Roadside - much broken old road timber,  
and in open oak & hickory woods with  
much grass and oak sprouts.

All species seen adult unbroken.

Melan. diff. exceedingly abundant.



1955. 15 (cont.)

Staphylin. 1 juv. kept.  
Neapleuronema juvs. no adults noticed.

Syrphula, num. adults & juvs.

Cerypha in dry area.

Hadrortetix common on the old pavement area.

Schistocerca comm. 1 sp. seen 1 taken.

Mel. diff. on alone.

" short-winged. 2 taken (DT).

" long-winged. 1 ♂ taken.

Hesperotettix speciosus a few, 2 taken.

Campylomma a few juvs.

Orth.  $24 + 367 = 391$ .

Utheria  $3 + 2 = 5$ .

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1955. 16 5 ms. E. of Ferris, Atoka  
Co., Okla. Elev. 520 feet. (Aug.)

[Immured to the W. of the Preshmatula Co., Ariz.]  
Aug. 6, 1955. (R)

Oak woods with heavy thin oak ground cover,  
and grass patches interspersed. (all short  
grass & weeds.)

All Orth. recog. as adults taken.

1 juv. Brumma, curious by in a wood  
trail with no meadow-type grass anywhere  
near!

Syrphula few.



Spharagnum bollii Few in the oak scrub.

" cristatum All seen (1) - on the  
dry partly road edge.

Mel. short-wing. 1 taken in wood, others  
seen

Mel. long winged. In oak scrub

Altth.  $9 + 391 = 400$

Altth. vis.  $0 + 5 = 5$ .

↓ 1955.17 1 m. W. of Hugo, Chertaw Co.,  
Chla. Elev (an.) 408 ft VIII. 6. 1955.  
(R.)

Roadside, very tall <sup>wild</sup> ~~scrub~~ - wild flowers.  
Everything recogn. Taken.

Diapheromera imm. only seen.

Lyrtula imm. ad. & imm.

Mermisia quite numerous, flying freely and  
far, females particularly.

Aphidella a few.

Hesperotettix speciosus 2 taken.

Melanopterus diff. Numerous.

" funer-rubrum. 2 taken.

Anthrenum sev. imm.

Altth.  $13 + 400 = 413$ .

Altth. vis.  $0 + 5 = 5$ .



✓ 1955 18 5 mo. S. of Powderly, Lamar Co.,  
Texas. Elev. (an.) 425 ft. VIII. 6. 1955. (R.)

Tall grass - woods, with some oak scrub under  
scattered oaks. All species recognized taken.

1 ad. ♀ Brumia as above.

Heaphermia num. - largely adult.

Syrphula common.

Mercuria num. very active - alert.

Hesperotettix pratensis 1 taken.

Melampus vittatus taken.

" Mel. vitt. - only in oak scrub.

Orth. 17 + 413 = 430.

Other ins. 0 + 5 = 5.

✓ 1955 19 Near Petty, Lamar Co., Texas.  
Elev. (an.) 600 ft. VIII. 7. 1955 (R.)

Old fields on black prairie soil, grown up  
loosely in coarse, tall grass.

Mel. diff. swimming. Not much else.

Heaphermia num. in large part adults.

Syrphula a few.

Mercuria ditto.

Hesperotettix spumosa, a few. 2 taken.

Mel. vittatus a few.

Orth. 21 + 430 = 451.

Other ins. 0 + 5 = 5.



↓  
1955.20 3 ms. E. of Borham,  
Fannin Co., Texas. Elev. (am.) 575 ft.  
VIII. 7, 1955. (R.)

Roadside park with oaks and adjacent  
undisturbed prairie corn and some short  
grass (mowed).

Stagmomantis juv. kept.

Hispanomeria a few in tall grass

Mermiria in fair nos.

Lophula " " "

Cryptorhynchus num. in short grass (mowed)

Aphis 1 spec. taken.

Mel. diff. numerous. Neogast. pratensis 1 in tall grass.  
" smaller, long-winged sp. 1 ♀ all mowed. gracilis 2 in short grass.  
Andlycorhynchus appar. 2 species, both in  
tall prairie corn, flying freely.

Archimimus 1 ♂ ditto.

Orth. 29 + 451 = 480.

Orth. ins. 1 + 5 = 6.

1955.21 1.5 ms. W. of Bella,  
Grayson Co., Texas. Elev. (am.) 650 ft.  
VIII. 7, 1955. (R.)

Ung. plant corn, with much tall grass,  
many thistles and a tall composite



1955. 21 (cont.)

gone to seed.

Mel. diff. very abundant.

Stagmomantis sp. juv. taken.

Diaphanura very num., almost all ad.

Merminia common.

Campylaspis 1 juv. taken.

Mel! <sup>flavipes type</sup> Stictopoda 1 taken.

~~Or~~ Conocrochilus strictus 1 imp.

Ooth.  $23 + 480 = 503$ .

Other ins.  $0 + 6 = 6$

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↓ 1955. 22 2 ms. W. of Whitesboro,  
Cooke Co., Texas. Elev. (app.) 830 ft. VIII. 8. 45.  
(R.).

In roadside tall grass, with Thruway  
spots.

Merminia, in fair nos.

Syrphula abundant.

Agrotis 1 imp.

Leptis 1 imp.

Hippisus num. in center of spot. Thoroughly  
flying, but slow to rise.

Acronyctus sp. imp.

Ooth.  $15 + 503 = 518$ .

Other ins.  $0 + 6 = 6$

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↓  
1955.23 7.5 mo. S. of Sanger,  
Denton Co., Texas. Elev. (an.) 800 ft.  
VIII. 7. 1955. (R.).

Small area of original prairie com.  
All species recognized - taken exc. M. diff.  
Alaphromera very abund.

Lythra num.

Memoria "

Agrostis num. none on ground surface.

Parasitica  
~~Parasitica~~ 1 ♂ mpt.

Desmodium spec. 1 ♀ mpt.

Hel. th. w. sp. 1 ♀ mpt.

Cynoph. strictus a few.

Cnth.  $578 + 34 = 552$ ,

Utter in.  $0 + 6 = 6$ ,

↓  
1955.24 Soap Creek, 6.2 mo. S. of Mansfield,  
Johnson Co., Texas. Elev. (an.) 675 ft.  
VIII. 8. 1955. (R.).

Roadside area with short grass and  
low semi-prostrate minosa-like  
patches - border of tall grass.

Alaphromera a few.

Boopedon a very few, both sexes taken.



1955-24 (cont.)

Asphondylia - 1 taken, swept.

Hippiscus a few, ad. - juv. taken.

Emmetobrya locally num. in short  
grass area, a few juv. most adults.

Androtettix 1 taken, all on

Mel. diff. found.

Amblyonychia lineata 1 ♀ swept

catch,  $552 + 27 = 579$ .

Other vis.  $0 + 6 = 6$

1955-25 5-5 ms. S. of Waxahachie,  
Ellis Co., Texas. Elev 600 ft. (an.). VIII.8.1955  
(R.)

Roadside but disturbed and not native  
com. Little except swarms of Mel.  
diff.

Stagonom. juv. numerous.

Pseudomyle not quite adult.

Merminia num. - 1 taken.

Agrostis num.

Desmodium speciosa 1 swept.

catch.  $13 + 579 = 592$ .

Other vis.  $0 + 6 = 6$

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1955.26. 6 ms. S. of Rice, Navarro Co.,  
Texas. Elev. 500 ft. VIII.8. 1955. (R.)

In range field not heavily grazed

Pitaneutria 2 juvs. mpt.

Pseudoceryle 1 juv. mpt.

Syrhula num.

Agelaius num.

Chortophaga 1 juv. mpt.

Hesperistix opacica 3 m. m. taken.

Mel. diff. abundant. Paraidemma 2 ♀ taken  
" num. some. others num.

Ceryle tristis ad. ♀ taken, mpt.

Pedicularis 4 females in corn close to  
ground - no other actually seen. <sup>1</sup> mpt.  
Uth. 26 + 592 = 618, num.  
Other ins. 0 + 6 = 6.

1955.27 2 ms. S. of Richland, Navarro  
Co., Texas. Elev. 475 ft (av.) VIII.8. 1955. (R.)

In oak woods and adjacent piece of  
natural prairie.

Mel. diff. common.

Pseudoceryle - Heiphrona mpt  
in nat. prairie.



1955.27 (cont.)

Stagmom. 1 juv. swept in prairie area.  
Syrphula juvs. taken, didn't notice any  
adults.

Mercuria num. in prairie.

Alpeya abundant in prairie area.  
Campylotarsus 1 juv. swept in ditto.

Paraidemona 1 ♂ swept

Mel. discolor type. 3 ♂ taken in oak <sup>in oak woods under - not in many</sup>  
woods ground cover - other seen, but  
not num.

Uth.  $35 + 618 = 653$ .

Uth. vis.  $0 + 6 = 6$ .

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✓ 1955.28 6.5 ms. S. of Reese, Rimestone  
Co., Texas. Elev. 650 ft. (an.) VIII. 8. 1955. (R.)  
Edge of oak woods and adj. old field.

Very little.

Chortophaga 1 ad. (Teratologic for limb.)

Mel. flavidus type. 1 ♂ 1 ♀.

Oecanthus 1 swept.

Uth.  $5 + 653 = 658$ .

Uth. vis.  $0 + 6 = 6$

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1955.29 8 ms. S. of Bryan, Brazos Co.,  
Texas. Elev. 400 feet. VIII. 9, 1955. (R.).

Roadside - largely native corn. All species  
recognized taken etc. 1 Hadrotettix + 1  
red-winged Aegialia.

Cyphobella local, few seen but adult.

Microchloa very local, chiefly in very short spicate  
grass.

Emmettomyia very few - 1 taken.

Campylanthus 1 juv. taken.

Paraidemna common, large in low  
mossy shrub.

Melanophus diff. num.

" 2 other species - few.

Neurostictus speciosus few.

Crematophanes tristis a few.

Orth.  $54 + 658 = 712$ .

Orth. vis.  $2 + 6 = 8$ .

↓

1955.30 10 ms. NW. of Navasota,  
Brazos Co., Texas. 325 ft. elev.  
VIII. 9, 1955. (R.)

Sand spurs and short + medium  
height grass under open oak woods.

Little variety - everything recognized  
taken.



1955.30 (cont.).

Syrbula num.

Mermiria a fair no. - long flying.

Cephus a few.

Aphid a number, free-flying.

Short-wing. Melanophus largely in sandpiper.

Orth.  $26 + 712 = 738$ .

Other ins.  $0 + 8 = 8$ .

↓ 1955.31 2.5 ms. W. of Washington, Washington  
Co., Texas. Elev. 350 ft. VIII.9, 1955. (R.).

Roadside native cover - tall grass,  
yellow-flowered mimosa-like tall  
shrub, scattered low mesquite.

Everything recognizable taken exc. Mel. diff.

Pseudomyia, a few juvs. swept.

Stenomantis a number of juvs. swept

Syrbula abundant, ad.

Mermiria " all ad.

Cephus few, ad. - juvs.

Campylomma ad. - juvs in a number of insects.

Neopentia species numbers.

Melanophus robustus? 1 ♂, all seen.

" 2 th.-winged spp.

Anthomyia retundif. 1 ♀ swept.

Orth.  $34 + 738 = 772$

Other ins.  $0 + 8 = 8$



↓ 1955.32 5 ms. S of Peters, Austin Co.,  
Texas. Elev. 250 ft. VIII. 9, 1955. (R.)

Small sand area and roadside fall  
weds. All species recogn. taken exc.

1 Schistocerca.

Brumma 1 ad. ♀ swept from fall weds.

Mermiria numerous.

Agrostotettix, a few.

Chortophaga a few adults, <sup>seen (1 taken)</sup> 1 juv. taken

Hippiscus a number, long-flying.

Psiridia small colony in same area.

Spharagemon cristatum 1 taken, all seen  
in sand area.

Paraidemma few - 1 taken.

Cneph. tritars a few.

Orth. 14 + 772 = 786.

Usteria 1 + 1 = 2.

↓ 1955.33 10 ms. S. of Columbus,  
Colorado Co., Texas. Elev. 300 ft.  
VIII. 9, 1955. (R.).

Roadside, coastal prairie conditions.  
little variety.

All species recogn. taken ex Mermiria  
+ Hippiscus.



1955.30 (cont.).

Syrphula num.

Merniria a fair no. - long flying.

Cephus a few.

Aphid a number, free-flying.

Short-wing. Melanophus largely in sandpiper.

Orth.  $26 + 712 = 738$ .

Other ins.  $0 + 8 = 8$ .

↓ 1955.31 2.5 ms. W. of Washington, Washington  
Co., Texas. Elev. 350 ft. VIII.9.1955. (R.).

Roadside native cover - tall grass,  
yellow-flowered mimosa-like tall  
shrub, scattered low mesquite.

Everything recognizable taken etc. Mel. diff.

Pseudomyia, a few juvs. swept.

Stegomyia a number of juvs. swept

Syrphula abundant, ad.

Merniria " all ad.

Cephus few, ad. + juvs.

Campylura ad. - juvs in a number of species.

Neoplatia species numbers.

Melanophus robustus? 1 ♂, all seen.

" 2 th.-winged spp.

Anthomyia rotundif. 1 ♀ swept.

Orth.  $34 + 738 = 772$

Other ins.  $0 + 8 = 8$



✓ 1955.32 5 ms. S of Peters, Austin Co.,  
Texas. Elev. 250 ft. VIII. 9, 1955. (R.)

Small sand area and roadside fall  
weds. All species recogn. taken exc.

1 Schistocerca.

Brumma 1 ad. ♀ swept from fall weds.

Mermiria numerous.

Agrostotettix, a few.

Chortophaga a few adults, <sup>seen (1 taken)</sup> 1 juv. taken

Hippiscus a number, long-flying.

Piridra small colony in same area.

Spharagemon cristatum 1 taken, all seen  
in sand area.

Parademmona few - 1 taken.

Cneph. fritus a few.

Orth.  $14 + 772 = 786$ .

Usteria  $1 + 1 = 2$ .

✓ 1955.33 10 ms. S. of Columbus,  
Colorado Co., Texas. Elev. 300 ft.

VIII. 9, 1955. (R.).

Roadside, coastal prairie conditions.

little variety.

All species recogn. taken ex Mermiria  
+ Hippiscus.



1955.33 (cont.)

Syrphula, a few.

Cyphodactylus, ditto

Asperitettix spurius, a few.

Melanocephalus sp. 1 ♀.

Conocrepis sp. 1 ♂.

Orth. 6 + 786 = 792.

Orth. ins. 0 + 9 = 9

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1955.34 5 ms. S. of Altair, Colorado  
Co., Texas Elev. 275 ft. VIII. 9, 1955: (R.)

Coastal prairie conditions, but with  
sand open at road edge. Everything  
muzzled. Taken.

Pseudocercophora 1 juv. swept.

Syrphula common, ad. + juv.

Amelytropsis a number of small juv.

Hippodamia <sup>Chortophila 1 juv. swept.</sup>  
a number seen, 1 taken.

Campylacanthus a few juv.

Melanocephalus th-w. 1 swept.

Orth. sp. 1 ♂ taken

Sundania 1 adult taken, also sev. juv. notes.

Orth. 19 + 792 = 811

Orth. ins. 0 + 9 = 9

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✓ 1955.35 Coleta Creek, 1.5 ms. WSW. of  
Raisin, Goliad Co., Texas. Elev. 75  
ft. VIII. 10. 1955. (R.)

Roadside park with short grass under  
live oak and tangle of tall weeds & ferns  
and similar vegetation bordering park.  
All species reared. Taken.

Merminia numerous.

Cephus 1 seen & taken.

Acrostellus a small number.

Cephus 1 juv. Taken, sev. ads. seen.

Chortophaga 1 ad. taken.

Spharagmus cristatus type. a few ads. & juv. <sup>on sandy spots.</sup>

Schistocerca juvs. Taken - no adults seen here.

Pirindia a few on sandy spots  
Hesperotettix pratensis a fair no.

Parademonia numerous.

Melanoplus th. - w. Local.

Rumex 2 Taken at separate points  
in tall weeds.

Am. Mycomyza brevistipes in tall weeds,  
three taken.

Neonemophila one in ditto

Conocephalus strictus? 1 ♀ deep red brown.

Orth. 4 + 811 = 852

Orth. ins. 0 + 9 = 9.



1955.36 Goliad State Park, Goliad, Goliad  
Co., Texas. Elev. 175 feet. V. 11. 10. 1955. (R.)

Natural vegetation of area - park-like like  
live oaks, mesquite and a few other species  
of trees with heavy undergrowth of tall  
tangled grass, native shrubs and prickly  
pear.

Everything very young, adult was taken etc.

1 Stenocranus which alighted too high.

Stenocranus 1 juv. swept.

Pseudoceryle imm., appar. not mature.

Mermis a few.

Syrphid - juv. only.

Amblytropidia a few juv.

Mesochorus a few.

Spharagemon cristatus a number, two taken.

Psittalia a few, local.

Chortophaga a few.

Cyphus a few, a pair taken separately.

Schistocerca sp. juv. taken.

Neopenthetix speciosa a few.

Paraidemona common.

Mel. diff. a few.

" long-n. sp. 1 taken.

" sp.? juv. taken.



Pediodontes 1 jumping in fall  
winds

Cremophanes stritus 1 ♂ taken.

Orth.  $51 + 852 = 903$ .

Orth. ins.  $0 + 9 = 9$ .

✓ 1955. 37 3.5 ms. SW. of Woodboro,  
Refugio Co., Texas. Elev. 25 ft (am.)  
VIII. 10. 1955. (R.).

Roadside weeds and grasses, some  
Covacacia. Everything recognizable.

Litaneutria 1 very small one taken.

Diapheromera - Pseudoscorpion num.

ads. of former largely males.

Microchloa a very few.

Cephalothrips not common.

Mermiria a few.

Chiroptera 1 ♀ swept.

Cremophanes 1 ♂ taken.

Orth.  $29 + 903 = 932$ .

Orth. ins.  $2 + 9 = 11$ .



✓ 1955-38 Nueces River crossing, 5 ms.

S.S.W. of Odem, Nueces Co., Texas.

Elevation 40 feet. VIII. 10. 1955. (R.)

Syrphula a number

Asperitellus speciosus numerous.

Melanophus th. w. sp. a few.

Paraidemna, a very few.

Disturbed corn, also apparently  
drought damaged, open and edge  
of mesquite, acacia and retama  
tangle bordering river bank.

Very little seen - all recogn. Taken

ex c. M. diff. - sev. Mermia. Very few.

Catch.  $10 + 932 = 942$

Catch ins.  $0 + 11 = 11$ .

✓ 1955 39 1.5 ms. W. of Charkewood, Nueces  
Co., Texas. Elev. (alt.) 60 ft. VIII. 11. 1955. (R.)

Roadside tall grass with mimosa.

Virtually no C. except multitude of  
phorids, almost all juvs. Blispheron.

Pseudoscorpion. 1 juv. Syrphula?, 1 Epura taken.

Catch.  $15 + 942 = 957$

Catch ins.  $0 + 11 = 11$ .



1955.40 8 ms. S. of Robstown, Nueces Co.,  
Texas. <sup>900 ft.</sup> Elev. . . VIII. 11. 1955. (R.)

Roadside in drought-stricken cotton country.

Virtually nothing. 1 Mermiria lost.

1 juv. phanid - 2 juv. melanopids.

Uth. 3 + 957 = 960.

Uth. ins. 0 + 11 = 11.

---

1955.41 7 ms. S. of Kingville, Kleberg Co.,  
Texas. Elev. 50 ft. (an.) VIII. 11. 1955. (R.)

Roadside with low mesquite, prickly  
pear, tall grass & weeds.

Almost nothing.

Chorophoma ♀ & ♂ swept. 1 ♂ Choropetala  
swept. 1 Mermiria.

Uth. 5 + 960 = 965.

Uth. ins. 3 + 11 = 14

---

1955.42 3 ms. S. of Santa Kenedy Co.,  
Texas. Elev. 40 ft. (an.) VIII. 11. 1955. (R.)

Northern edge of sand dune area - dunes  
have fixed and largely covered with low  
ground corn and scattered groves of  
low oaks. Everything recognizable taken.



1955 42 (cont.)

Immature phasmids, numerous. Pseudoscorpion,  
numerous.

One-headed Fendalid - ? "Radiostatus" ? juvs. only.  
Parasidermanus 1, all juvs. approx. 3 instars.  
juv. melanoploid - 1 instar.

Elaphoglossa all juvs. numerous, and  
in at least 3 instars.

Cyclotriton 1 instar.

Orth. 27 + 965 = 992.

Orth. no. 2 + 14 = 16.

↓  
1955.43 10 mi. S. of Sarita, Kenedy Co.,  
Texas. Elev. 40 feet (an.). VIII.11.1955: (R.)  
Sand dune area. The dunes here immobilized  
and covered with heavy matted corn and  
tall grass. Very difficult to penetrate and  
work. All recogn. species taken except 1  
flying Mermis.

Pseudoscorpion in various instars, numerous.  
Elaphoglossa 1 instar.

1 juv. melanoploid - juvs. ?

Elaphoglossa very small juvs. numerous.

Orth. 16 + 992 = 1008

Orth. no. 0 + 16 = 16.



✓ 1955.44 4 ms. S. of Armstrong, Kenedy  
Co., Texas. Elev. 25 ft. VIII. 11. 1955. (R.)  
On sandy soil with scattered mesquite  
and much prickly pear. All species  
recognized except them.

Alphulella 1 script.

1 juv. green and white mottled melanophilis-  
gines?? not Campylacantha? What?

✓ Hlichopitula all secured were in midst  
to shoulder high "brown-eyed Susan"  
composites. Two adult ♀♀ taken, 2  
♂♂ in instar preceding maturity -  
but could not locate any ♂ ad.

Orth. 9 + 1008 = 1017.

Orth. ins. 3 + 19 = 22.

✓ 1955.45 2 ms. S. of Yturria, Willacy  
Co., Texas. Elev. 1950 feet. VIII. 11. 1955. (R.)  
Roadside weeds & grasses, much  
sand spur, some "brown-eyed Susan"  
composites. Everything seen taken.

Paraidemona, very local.

Hlichopitula 1 juv. ♀ script.

Orth. 8 + 1017 = 1025.

Orth. ins. 2 + 22 = 24



1955. 46 3.5 ms. S.E. of San Benito, Cameron  
Co., Texas. <sup>Criss 35 ft.</sup> VIII. 12, 1955. (R.)

Roadside full grass and weeds, chiefly  
in drain. Nothing exc. <sup>juv.</sup> Heichopetala  
and 1 ad. Courcophanes fasciatus Type.  
Nothing at all found along edge of patch  
of natural tree and brush cov.

Orth. 3 + 1025 = 1028.

Utter ins. 0 + 24 = 24.

---

1955. 47 2 ms. S. of Ullinito, Cameron  
Co., Texas. Elev. 50 feet. VIII. 12, 1955. (R.)

Old field grown up in weeds and with  
grass patches, remnants of original  
corn here and there.

All U. seen, taken, and by trapping.  
Juv. Stagmomantis green & brown, latter  
with red. & cand. form. dark distal.

Paraidemna var. ♂.

Juv. melanophila. - 3

Heichopetala juv. ♀, all seen.

Orth. 9 + 1028 = 1037.

Utter ins. 0 + 24 = 24

---



✓ 1955: 48 3 mo. E. of El Jardin,  
N.W. of Brownsville, Cameron Co., Texas.  
VIII. 12. 1955 (R.). Elev. 30 ft.

Low, open natural corn, nothing  
higher than knee, mimosaes and  
composites, grasses - some prickly pear,  
juv. Stagmomantis, quite small, script.

Paraidemna sev. adults, seemed more  
partial to a low plant which in structure -  
foliage suggested Californian chamise.  
Chlorophanes ad. ♂ - ad. ♀ - juv.  
script.

Chloropetala, apparently two species,  
but a single male of one with double  
curves 2), and last stage juv. of  
both sexes - even younger ones of the  
other, the males of which seem to have  
simple falcate curves.

Orth. 23 + 1037 = 1060

Orth. inv. 3 + 24 = 27.

---



✓ 1955.49 12 ms. W. of Boca Chica,  
Cameron Co., Texas. Virtually at  
sea-level. VIII. 12. 1955. (R.)  
Natural cover of waist-high shrubs -  
some acacia, others different spiny  
types, but almost everything spined.  
Clas masses of samphire or pickle-  
weed. All Cl. seen taken.

Juv. Stagnomantis rw. swept.  
Pseudoeurycea 1 ♂ ad. "  
Elaphromerus ad. ♀♀ " 1 juv. also.  
Paraidemna rw. ad.  
Juv. melanopid rw.  
Ceanothus 1 ad. swept.

Orth.  $16 + 1060 = 1076$ .  
Other ins.  $2 + 27 = 29$ .

✓ 1955.50 8 ms. W. of Brownsville.  
Cameron Co., Texas. Elev. 125 feet.  
VIII. 13, 1955. (R.)

Area of roadside weeds bordering  
swamp of mesquite and retama.  
1 juv. appen. of Platylactista, on ground -  
Paraidemna local, in low cover, adults -  
? juvs.



Ellichopitula abundant, but largely immature.  
In variety of weeds. Hunted particularly  
for adults, but virtually all were  
taken by sweeping.

Oecanthus swept.

Orth.  $45 + 1076 = 1121$ .

Other ins.  $3 + 29 = 32$ .

1955. 51 . 5 m. SE. of Loo Indios,  
Cameron Co., Texas. Elev. 110 feet.  
VIII. 13, 1955. (R.).

Roadside weeds of various types in  
and about low mesquite.

Oligoneura very small juv. swept.

1 juv. Stagmomantis swept.

1 " Thelypteris swept - search for more  
reproduction.

Pseudoceryle 1 ad. + juv. ♂♂. swept.

Diapheromera 2 ad. ♀♀. swept.

Paraidemna ad. - juv. on ground or  
in lowest cover.

Ellichopitula in various medium-height  
weeds, but in partic. in one of strict types.

Orth.  $33 + 1121 = 1154$

Other ins.  $1 + 32 = 33$ .



1955.52 2.5 ms. W. of Progress,  
Hidalgo Co., Texas. Elev. 125 feet.

VIII. 13, 1955. (R.)

Grass along edge of and within mesquite  
thickets and with areas of rather dense  
grass, in large part sun-cured. No  
Q. except mantids, all latter taken by  
sweeping grasses.

Oligoneicella 1 ad. ♂, approx. 2 ad. ♀ and  
nw. juvs.

Stagmomantis all juvs..

Orth. 9 + 1154 = 1163.

Orth. ins. 0 + 33 = 33.

---

✓ 1955.53 Near Los Abasco (west of Mission about  
12 ms.), Hidalgo Co., Texas. Elev. 300 feet  
VIII. 13, 1955.

So. Texas scrub, disturbed only by grazing,  
made up of mesquite, huisache, prickly  
<sup>joint cactus,</sup> Croton and numerous other  
spiny shrubs. Almost no grass and  
only small patches of weeds. Everything  
except.

Wounded Chlaenius 1 nearly ad. ♀ swept.  
Juv. melanophil. ditto.

Chlaenius prob. 2 spp. 1 by male only, others



presumably the same as those taken earlier  
in the day. All swept, and largely  
from one species of undergrowth.

$$\text{Cuth. } 10 + 1163 = 1173.$$

$$\text{Cuth. ins. } 0 + 33 = 33$$

---

1955.54 4 ms. N. of Edinburg, Hidalgo Co.,  
Texas. Elev. 100 feet. VIII. 14, 1955. (R.)  
Roadside weeds - no O.

$$\text{Cuth. } 0 + 1173 = 1173.$$

$$\text{Cuth. ins. } 5 + 33 = 38$$

---

1955.55 1 ms. N. of Fayville, Hidalgo  
Co., Texas. Elev. 100 feet. VIII. 14, 1955. (R.)  
Roadside and adjacent field on sandy  
ground. Nothing in O. except two  
juv. - one Gyllus - the other prob.  
Exochus!

$$\text{Cuth. } 2 + 1173 = 1175.$$

$$\text{Cuth. ins. } 9 + 38 = 47$$

---

1955.56 8 ms. N. of San Manuel,  
Hidalgo Co., Texas. Elev. 60 feet.  
VIII. 14, 1955. (R.)

Roadside weeds and hollow with



1955-56 (cont.)

variety of vegetation.

Syrphula ad. : juv. in low cover in field.

Heliopsis heliophoromera & Pseudoceryle  
general, few adults.

Heliopetala 1 female in each area.

Conocyphalus 1 juv. swept.

Orth. 23 + 1175 = 1198.

Orth. ins. 2 + 47 = 49.

↓  
1955-57 3.25 mo. N of Encino, Brooks  
Co., Texas. ~~Oct. 14~~ VIII. 14, 1955. (R.)

Roadside with scattered low cover on loose  
sand. Anything recognizable. Taken except  
few long-flying Aphids.

Phasmoda, all juvs. swept from waist-  
high weeds. Paraidemona 1 on ground.

Mermiria in short grass, all seen.

Juv. Heliopetala swept from waist-high  
weeds.

Orth. 15 + 1198 = 1213.

Orth. ins. 4 + 49 = 53

---



✓ 1955.58 1 m. N. of Barroco, Brooks Co.,  
Texas. Elev. 140 feet. VIII. 14, 1955. (R.)

Roadside shallow drain in soft sand,  
with grass and mixed medium-high  
corn. All megn. forms taken

No definite assoc. with any specific plants.

Elaphromera med. num. but few adults.

Syrphula juvs. a few.

Proctos Texana a pair, in ground.

Large pun juv. Tuxalid ?? Juva ??

Melanophus flavipes type 1 ♂ in low  
corn.

Paraidemna one in very low corn.

Ellichoptala in tw. plants, 1 ♂, sev. ad.

♀ and a number of juvs.

Orth. 31 + 1218 = 1244

Orth. mis. 1 + 53 = 54.

✓ 1955.59 7 ms. N. of Falfurrias,  
Jim Wells Co., Texas. Elev. 170 feet.  
VIII. 14, 1955. (R.)

Low corn of short grass with many  
patches of very low acacia or similar  
mimosa-like plant, and others of  
tall weeds.



1955.59 (cont.)

1 juv. Blapheromera swept.

Syrphula 1 juv.

Large green juv. Truxalid 1.

Opis, a few in short grass.

Mesochorus 1 ♀ in short grass.

Paraidemna 1 on ground.

Neoromphalus 1 in tall grass, another  
seen.

Helioptata in both tall weeds and  
in low acacia like corn.

Orth.  $16 + 1244 = 1260$

Cetera ins.  $2 + 54 = 56$

---

✓ 1955.60 5.5 ms. W. of Alice, Jim Wells  
Co., Texas. Elev. 225 feet. VIII. 15, 1955. (R.)

Roadside with very short grass, scattered  
mesquite and random bunches of  
tall grass.

Blapheromera - Pseudomyle swept  
generally.

1 juv. Syrphula in short grass, Opis & some  
in same.

Paraidemna in same corn.

Helioptata 1 juv. from weed tangle.

Neoromphalus & Pseudomyle from



Full grass patches.

Arth. 15 + 1260 = 1275.

Other ins. 1 + 56 = 57.

---

1955.61 10.5 ms. W. of San Diego,  
Huerfano Co., Texas. Elev 500 ft. VIII.15 1955.  
(R.).

Roadside spots of vegetation along a  
cross-drain, on a limestone base.  
Short grass & weeds.

Diapheromera 1 juv. ♀. Insect.

Syrphula num. but largely immat.

Paraidemna numerous in the  
Insect com.

??? Oedemura? 1 juv. ♀. Taken from  
one of a small stand of the bluish  
gray shrub (~~photo~~ plant sample 1).  
All seen. Prob. Colletes guggi det Smith

Campylanthus 1 juv. Insect.

Chiroptera sev. very small juv.  
Insect.

Neonophanes 1 from tall grass.

Arth. 32 + 1275 = 1307.

Other ins. 2 + 57 = 59.

---



✓ 1955.62 17 ms. W. of San bligo,  
blural Co., Texas. Elev. 480 ft. VIII.15.1955.  
(R.).

Roadside weeds and grass patches in  
a badly overgrazed and drought-stricken  
stricken general area.

Everything seen taken.

Liaphronema juv. impt. (1 has regenerated  
from egg.)

Mermiria 1 ♂ taken.

Syrphula juv. taken.

Campylacantha 1 juv. impt.

Neomorphalus <sup>Microptala 1 juv. impt.</sup>  
1 ♀ in grass patch.

Uths. 8 + 1307 = 1315.

Uth. ins. 2 + 59 = 61.

---

1955.63 5 ms. W. of Freer, blural Co.,  
Texas. Elev. 600 ft. VIII.15.1955. (R.)

Nothing seen exc. 1 large cantharid beetle.

Uths. 0 + 1315 = 1315.

Uth. ins. 1 + 61 = 62.

---

✓ 1955.64 11 ms. W. of Freer, blural  
Co., Texas. Elev. 600 ft. VIII.15.1955. (R.)

Roadside weeds and grasses.

All seen taken exc. 1 Rh. verna, lost.



Syrphula a few adults.

Thermobia a few, 2 ♀♀ Taken.

Paraidemna, a few, on ground on  
low corn.

Juv. Schistocerca

Juv. melanoplids - juvena?

Urochopsternus or gigas. msp.

Orth. 10 + 1315 = 1325.

Orth. ins. 2 + 62 = 64.

---

↓ 1955.65 31 ms. W. of Freer, Webb Co.,  
Texas. Elev. 550 ft. VIII. 15. 1955. (R.)

Roadside with short and tall grass,  
and almost no weeds.

Everything recognized Taken.

Small colony of Encyrtophorus on  
almost bare whitish stony tilt.

Juv. Syrphula msp.

✓ Paratettix in damp spot from rain  
of yesterday.

Orth. 7 + 1325 = 1332.

Orth. ins. 2 + 64 = 66.

---



↓  
1955-66 18 ms. E.N.E. of Laredo, Webb  
Co., Texas. Elev. 725 feet. VIII. 15. 1955. (R.)  
Roadside mats of grass and weeds  
in area recently soaked by heavy rains.  
Anything recog. taken.

Syrphula juv. only.

Therminea 1 ♀.

Euclyptus or. adults - 1 green juv.

Juv. Melanophids.

Any small Elidopetala.

1 ad. ♂ Arctostema nupt.

Certh. 11 + 1332 = 1343.

Odonas. 0 + 66 = 66.

↓  
1955 67 6 ms. N. of Laredo, Webb Co., Texas.

Elev. 550 feet (an.) VIII. 16. 1955. (R.)

Roadside drain at crossing of small  
rill. Everything wet from last night's rain.

All species recog. taken except 1 ad. Schistocerca

+ 1 ♂ Elidopetala lost by jumping out of net!

1 ♀ Elaphromma nupt.

Syrphula ad. - juv. not seen.

Pholocera 1 taken. \* juv.

1 juv bediptid. nupt.

1 " Schistocerca in weeds.



Melanophus flavidus type. 1 ♀. all run.

Campylura a number of juvs.

Paraidemona a few.

Heliogutata 1 very run, juv. taken - 1  
ad. ♂ lost!!!

Conophorus 1 ♂ swept.

Orth.  $15 + 1343 = 1358$ .

Usteria.  $6 + 66 = 72$ .

---

1955-68 12 mo. N. of Laredo, Webb Co.,  
Texas. Elev. 720 feet (approx.). VIII. 16, 1955. (R.)

Roadside park with areas of undisturbed  
grass, low mesquite, etc.

Everything recognizable. Taken exc. Thermobia.

Syrphid chiefly immature.

Cypripis 1 swept from low ground corn.

Pterocera a few, 3 taken.

Campylura 1 juv.

Paraidemona numerous.

greenish melanophilid 1 ad. ♀ - a number of

Heliogutata a number of juvs. in 3 vials.

Orth.  $29 + 1358 = 1387$

Usteria.  $1 + 72 = 73$ .

---



✓ 1955.69

9 ms. N. of fork of U.S. 81 and 83 on  
83, Webb Co., Texas. Elev. 850 feet (amr.)

VIII. 16. 1955. (R.)

Roadside native cover - short grass,  
tall grass, bluetts<sup>(in bloom)</sup>, low mesquite and  
acacia. Everything recogn. taken.

Mermiria a fair number.

Ephydra - both adts. - juvs.

Paraidemona num. - some juv.

from melanophilid, 1 ad ♀, a num. of juvs.

Anthrenomyia lucasana 1 ♂ in tall grass.

Oct. 27 + 1387 = 1414

Other vis. 1 + 73 = 74.

✓ 1955.70 26 ms. N. of fork of U.S. 81 and 83 on  
83, Webb Co., Texas. Elev. 675 feet (amr.)

VIII. 16. 1955. (R.)

Roadside short and long grass, with  
woods in some patches. All species  
recogn. taken ex.c. 1 Schistocerca.

Pitaneutria 1 juv. impt.

Pseudoceryle 1 juv. ♀ ditto.

Mermiria a few.

Helichromys a single ♂ impt.

Alpeia, a few.



Asphix nr. ser., 1 taken.  
Anthracomyia 14 capt.  
Microcephalus 1p capt.  
Quaanthus 1 capt.

Orth.  $14 + 1414 = 1428$

Other ins.  $1 + 74 = 75$

1955.72 1 m. S of Asherton, Kimmit Co.,  
 Texas. Elev. 620 ft (ann.). VII. 16, 1955. (R.)

Roadside grass and weeds. Some area of  
 All species nozn. Taken exc. 1 Schistocerca  
Mermia a few.

Epia numerous in thicket grass.

Proctos a single ~~nozn.~~ from ground surface.

Asphix nr. ser., 1 taken.

Encyrtophus numerous on bare soil,  
 not at all difficult to capture.

Melampus sp. 1 juv. Parademonia  
Concepthalus sp. 1 juv.

Orth.  $21 + 1428 = 1449$

Other ins.  $0 + 75$



1955.72 7 mo. N. of Carrizo Springs, Kinney  
Co., Texas. Elev. 660 ft. (an.) VIII. 16. 1955. (R.)

Broad roadside hollow with bare silt  
spots and otherwise grassed with both  
long grass and short grass, and also  
some weeds.

✓ 1955.71 1 m. S. of Ashton, Kinney Co.,  
Texas. Elev. 620 ft. (an.) VIII. 16. 1955. (R.)

Roadside grass and weeds. All species  
recognized taken exc. 1 Chistruca.

Paratettix 1 swept in damp spot.

Sydna a few.

Paraidemona most numerous.

from Melanophila. 2 ♀♀, all seen.

Campylacantha "Campyrotata" 1 ♂

Taken from mesquite.

Trimerotropis pallidip. 1 taken, all seen.

Orth. 12 + 1428 = 1440.

Orth. ins. 2 + 75 = 77

↓  
1955.72 7 mo. N. of Carrizo Springs, Kinney  
Co., Texas. Elev. 660 ft. (an.) VIII. 16. 1955. (R.)

Broad roadside hollow with bare silt  
areas and otherwise heavily grassed with



both long grass and short grass, and also  
some weeds. All species recog. Taken  
exc. 1 Chistocerca.

Mermiria a few.

Opus nimbosus in short grass.

Polioptila one taken from ground surf.

Amphisp. nev. seen. 1 taken.

Eurostoechus numerous on the silt.  
rather hard in taking flight.

Melanophus sp. 1 juv.

Paraidemna

Correophagus sp. 1 juv.

Length  $21 + 1440 = 1461$ .

Other no.  $0 + 77 = 77$ .

---

1955.73 3 ms. N. of La Pryor, Zavalla  
Co., Texas. Elev. 920 feet (approx.) VIII. 16, 1955.  
(R.).

Open roadside with tall grass, low  
acacia and mesquite, occ. head high  
mesquite, much prickly pear and some  
joint cactus.

Syrphula a few. 1 juv. taken.

Polioptila 1 taken.

Campylorhynchus 1 juv. taken.

Melanophus flavidus sp. 1 ♀ taken.



1955.73 (cont.)

Helichoptala sv. juvs. nupt.

catch.  $6 + 1461 = 1467$ .

Other vis.  $2 + 77 = 79$

J 1955.74 5 ms. NW of Uvalde, Uvalde Co., Texas. Elev. 1200 ft (approx.). VIII.17.1955. (R.)

Roadside tall and short grass with scattered minoaceous low bush, Suidex, etc.

Everything recog. taken.

Pitaneutria 1 ad. nupt from ground.

Diapheromera nupt

Mermiria juv. 1 taken

Aphidius most juvs. not seen.

Boopidion 1 ad. ♀ + 1 juv. in low corn, active.

Porlocera 1 nupt.

Campylacantha juvs. : 1 ad. "Campio" type.

Paraidemona numerous in low corn.

Melanophus sp. th. w. 1 ad. legs ??

Arctura 2 ♂ nupt.

Helichoptala juvs. num. adults much less  
freq. - nupt from both low & high corn.

Cnephodorus tristis 1 ♀ nupt.

Oecanthus sv. nupt

catch.  $49 + 1467 = 1516$

Other vis.  $3 + 79 = 82$



✓ 1955-75 Laguna, Mueces River,  
Uvalde Co., Texas. Elev. 1360 ft. (am.)  
VIII. 17. 1955. (R.)

Broad grassy roadsides with bordering  
trees, some spring, some all partly  
under tall ashes.

All species recognized taken.

Diapheromera nupt, ad. - juvs.

Syrphula ad. - juvs. seen, adults taken.

Heichromorpha viridis ad. - juvs. in Monte  
pro.

Paraidemna a few.

Melanoplus long-w. 2 ♀ all seen, taken.

" H. w. 1 pr. Taken.

Campylomecyna 1 ad. - no. juvs.

Juv. melanoplids of two genera taken.

Heichropitula a few immatures.

Conophalus Wrighti 1 ♂, 1 ♀ taken.

Unch. 36 + 1516 = 1552.

Other ins. 1 + 82 = 83.

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✓

1955.76 1 m. N. of Campwood, Real Co., Texas. Elev 1760 ft. (an.) VIII.17.1955. (R.)

Roadside tall grass & weeds, many spiny bushes. Lost 1 ♂ Heliopetala, everything else unrecognized. Taken.

Diapheromera numerous, swept.

Syrphid a few, one taken.

Campylasanthia juvs. only.

Heliopetala 1 ♀ ad. & juv. taken.

Orth.  $24 + 1552 = 1576$

Other ins.  $0 + 83 = 83$ .

Cycloptilum  
swept

✓

1955.77 5 m. N. of Barksdale, Edwards Co., Texas. Elev. 2000 ft. (an.) VIII.17.1955. (R.)

Tall dense grass and scattered clumps of bushes. Very little here. Everything unrecognized. Taken exc. 1 Hippiscus.

Mesochorus ad. & juvs. few.

Campylasanthia 1 juv.

Juv. of two melanoploid genera.

Heliopetala 1 ♀ & juv. taken.

Cycloptilum 1 swept.

Orth.  $13 + 1576 = 1589$ .

Other ins.  $0 + 83 = 83$ .



1955-78 Escarpment rim of Edwards  
Plateau, 11 ms. S.E. of Rock Springs,  
Edwards Co., Texas. Elev. 2775 feet (an.)  
VIII. 17. 1955. (R.)

Tall and short grass on broken limestone  
surface, with stones varying in size from  
pebbles to boulders. Very little. Everything  
recogn. taken exc. 1 Mermiria - 1 Hadeot.  
Mesochorus several juvs. taken.

Syrphula 1 juv.

Orth. 3 + 1589 = 1592.

Orth. inv. 0 + 83 = 83.

1955-79 3 ms. NW. of Rock Springs,  
Edwards Co., Texas. Elev. 2950 ft. (an.)  
VIII. 17. 1955. (R.)

On Edwards Plateau, much broken  
limestone, low tree cover, short - long  
grass, some bushes. Very little O.

Everything recogn. taken exc. 1 Merm. - 1 Stach.  
Stagnomantis 1 juv. inst.

Syrphula few, all juvs.

Mesochorus few, adults - juvs.

Platylabus 1 taken in juv., all seen.



1955-79 (cont.)

Scutellaria 1 juv. taken.

Melanoplus laticornis? 1 ad. + 1 juv. taken.

Arctostaphylos 1 juv.

Helichrysum 1 juv.

Cyrtopogon two mpt.

leth. 16 + 1592 = 1608.

leth. vis. 1 + 83 = 84.

---

✓ 1955-80 21 ms. S. of Sonora, Sutton Co.,  
Texas. Elev. 2775 ft (an.) VIII. 17, 1955. (R.)

On Edwards Plateau limestone, roadside  
winds of various types (sunflower, Fumaria  
weed, sandspur, etc.), and tall grass.  
Everything mown. Taken.

Campylactis 1 juv. taken.

Arctostaphylos 1 juv. mpt.

Helichrysum 1 ad. ♂ + 1 ad. ♀ + juv. in  
runal stage, all in tall weeds.

Acanthus, 1 mpt.

leth. 14 + 1608 = 1622.

leth. vis. 1 + 84 = 85.

---



✓ 1955.81. 3.5 ms. W. of Sonora, Sutton Co., Texas.  
Elev. 2950 feet. VIII. 18. 1955. (R.)

Tall grass at cross drain and roadside.  
Tall grass and low corn. Everything  
recogn. taken exc. 1 flying Archaea.

Syrphula adults.

Mel. diff. 1 taken, all seen.

Small melanophids. <sup>seen</sup> taken

Pediodetes 1 ♀ in tall grass.

Micropterus both sexes ad. + juv.

~~all~~ Many juv. seen.

Uth. 20 + 1622 = 1642

Uth. no. 0 + 85 = 85

✓ 1955.82 23 ms. W. of Sonora, Sutton Co.,  
Texas. Elev. 2850 ft. VIII. 18. 1955 (R.)

In very tall waxy grass and a few  
waxy <sup>in</sup> roadside drain. Everything  
recogn. taken.

Elipheromera 1 ♂ taken.

Proctos 1 very sm. juv. taken.

Tropidolophus 1 juv. in short grass

Campylacantha juv.

Melanopterus 1 juv.



1955.82 (cont.)

Helichrysetala, 1 ad. pair (not in count)

• juvs. in taller grass.

Coccythrus 1 imm.

Count.  $13 + 1642 = 1655$ .

Other vis.  $1 + 85 = 86$ .

---

1955.83 27 ms. W. of Sonora, Crockett  
Co., Texas. Elev. 3150 feet. VIII. 18, 1955. (R.)  
Roadside tall grass, but ground deeply  
cracked by earlier drought. Nothing  
except 1 Mel. parkardi noted or taken.

Count.  $1 + 1655 = 1656$ .

Other vis.  $2 + 86 = 88$

---

1955.84 7 ms. W. of Uzon, Crockett  
Co., Texas. Elev. 3200 feet. VIII. 18, 1955. (R.)  
Roadside short grass and low weed patches.  
Everything recognizable. Taken.

Helophorus ad. ♂♂ & juvs.

Syrphula juvs. only. 3 imm.

Cephus 1 ad.: 1 juv. Taken.

Trimerotropis pallid. 2 seen, 1 taken on  
trans. spits.

Melanoplus juvs. only.

Helichrysetala juvs. only.

Count.  $17 + 1656 = 1673$ .

Other vis.  $0 + 88 = 88$ .



1955.85 26 ms. W. of Ozona, Crockett  
Co., Texas. Elev. 3350 feet. VIII. 18, 1955. (R.)  
Roadside. Nothing except 1 juv.

Blischogutula.

1955.85 6 ms. E. of Sheffield,  
Crockett Co., Texas. Elev. 2625 feet.  
VIII. 18, 1955. (R.)

Ranch pass on roadside and bottom  
land on east side of Pecos River.

Everything recogn. Taken exc. 1 schist  
Mermiria a number, both sexes taken.

Syrphula a few.

Parasynaldis a single one seen - taken.

Campoplexanthus adts + juvs.

Mel. labialis 1 ad. + 1 juv.

" two other species, adts. Taken.

Blischogutula 1 juv.

Certh. 16 + 1673 = 1689.

Certh. ins. 1 + 88 = 89.

---

1955.86 9 ms. W. of Sheffield, Pecos  
Co., Texas. Elev. 2875 feet. VIII. 18, 1955. (R.)

Covillea - mang. behind vine.

Roadside full grass + other lower corn.

Everything recogn. taken.



1955.86 (cont.).

Boettia num. in Corilla, ad. -

juvs. largely adult.

Uria a in roadside corn, ad. -

juvs.

Mermia a few in ditto.

Campylacantha just becoming adt. in roadside

Mel. lachrym one ♂ roadside.

" diff. 1 taken

" other sp. both sexes.

Helicopetala ad. ♂ - ♀ + juvs.

Urch.  $39 + 1689 = 1728$ ,

Urch. inv.  $2 + 89 = 91$

1955.87 4.5 ms. W. of Bakerfield, Pecos  
Co., Texas. Elev. 3260 ft. VIII. 18. 1955. (R.)

Roadside. Sparse grass & low bushes.

Also heavy grass and weed corn along  
a cross drain wash. Also a few Corilla.

All sps. noted secured.

Boopis 1 ♂ taken in low corn.

Uria a very few juvs.

Schistocerca 1 juv. in fall rank grass.

Campylacantha a few juvs.

Melanoplus diff. 1 taken, a few others seen.

" lachrym A number in fall grass.



Eusara 1 very sm. juv. mpt.  
Helichoptata 1 ad. pair (separately) and  
juv. One of the adults was  
in Corilla.

Ceanothus 1 mpt in tall weeds.

Crab. 15 + 1728 = 1743.

Other ins. 1 + 91 = 92.

↓ 1955. 88 6.5 mi. W. of Fort Stockton,  
Pecos Co., Texas. 3900 feet VIII. 19. 1955. (R.)

Roadside vegetation - desert grass &  
tangles of tumble-weed and numerous other  
mesquite-like plants. Everything very  
taken ex. I. Minerva, 1 ad. Boopis &  
1 Campylomma a "lamp".

Opis or juv.

Boopis 1 very small juv.

Trin. pallidipennis or. seen, 1 taken.

Mel. latissima 1 ♂ taken.

" long-winged 1 ♂ taken.

Sh. winged melanoplid 1 taken, all noticed.

Helichoptata pair taken in diff. ops. bushes.

Anthyconys 1 ♂, 2 ♀ All from tall weeds.

Crab. 12 + 17 + 3 = 1755.

Other ins. 2 + 92 = 94.



✓ 1955-89 2 ms. SW. of junction of U.S. 290  
and U.S. 67 [this 10 ms. W. of Fort Stockton],  
Pecos Co., Texas. Elev. 4075 feet. VIII. 19, 1955. (R.)  
Roadside with short grass (undisturbed)  
and various weeds (fumble weed among them).  
Very little. Everything recognizable except.  
Mermiria.

Trinervus pallidip. 1 taken.

Upeia a few.

Melanoplus lachrymans a few.

Chrysopetala 3 ♂, 1 ♀ ad. Taken, imm. juv.

Orth. 9 + 1755 = 1764.

Orth. ins. 1 + 94 = 95.

✓ 1955-90 Road saddle in hills, 15 ms. SW. of  
junction of U.S. 290 and U.S. 67 (W. of ~~Fort~~ <sup>4800 ft.</sup> Stockton). Pecos Co., Texas. Elev. ~~un. juv. 4800 ft.~~  
~~but ? prob. too high - check.~~ VIII. 19, 1955. (R.)  
Juniper about on slopes. Sun-cured short  
grass, green - sun-cured bunch grass, various  
low shrubs, some in flower.

Pseudosymple imm. only in part adult, in  
tall bunch grass.

Parabellus 1 ♀ from bunch grass.

Mermiria fixana 1 ♀, all seen.



Small melanophid, two taken, all  
recognized.

Helichoptala juvs. abundant, few adults,  
in a variety of plants.

Orth.  $20 + 1764 = 1784$ .

Orth. ins.  $2 + 95 = 97$ .

✓ 1955-91 31.5 ms. SW. of junction of  
U.S. 290 - U.S. 67, Brewster Co., Texas.  
[5 ms. S. of Noory side road). Elev. 4750  
feet. VIII. 19. 1955. (R.)

Short grass, with patches of tall grass,  
various low weeds, on micaceous  
low plant in bloom, the flowers red and  
orange. Everything recognized. Taken.

Chlaenius chiefly immat.

Meloidae neomex. few.

Chalcids one taken only one seen.

Juv. from Truxalis minor.

Boopis juvs only, a few.

<sup>Phaenocarpa</sup>  
Meloidae juvs. numerous.

Dactyloctenium, 1 pair (mated) in low matted patch,

Helichoptala 100 caught.

Orth.  $38 + 1784 = 1822$ .

Orth. ins.  $4 + 97 = 101$

1 pair  
seen.



✓ 1955.92 11 ms. W. of Marathon, Brewster  
Co., Texas. Elev. <sup>ca. 4200 ft.</sup> (not int). VIII. 19, 1955. (R.)  
Roadside very tall rank grass in drain  
and also native low corn on drier tilt.  
Everything recognized. Taken ex. Tropidolophus.  
Uria 1 taken.  
Boopis 1 juv. taken.  
Campylacanthus juv. only.  
Melanophus laticornis juv. + adults a  
number.

" Eng-winged species. humil.

Phortulites 1 ad. taken

Conosphaerus strictus ad. - juv. number.

Urtic. 23 + 1822 = 1845.

Urtic. no. 8 + 101 = 109.

✓ 1955.93 7 ms. S. of Marathon, Brewster  
Co., Texas. Elev. <sup>ca. 4100 ft.</sup> (check) VIII. 19, 1955. (R.)

Greatly diversified roadside - acacia,  
Koeberlinia, truncata and many other  
types. Everything recognized. taken!

Chrysomera abundant, and in great  
variety of plant com. One large group  
was in Koeberlinia.

Hydrula a few seen, 5 taken.

Campylacanthus 1 juv..



Blaphys hichoptala scattered in  
various corn.

Uoth.  $29 + 1845 = 1874$ .

Uth. ins.  $0 + 109 =$

1955.94 15 mo. S. of Marathon, Brewster  
Co., Texas. ~~Elev. (chart)~~ VIII. 19. 1955. (R.)  
ca. 3400 ft.

Black brush, Full brush grass, low brush  
grass, and much other low cover.

Very limited variety. Everything recog.

Taken. No trace of formication in black brush

Blaphys In fair nos., ad. & juv.

✓ Paropromela a few in low brush grass.

Trinervus - pallidip. a few - 1 Taken.

Chirotrichia sev. juvs. Taken.

Hichoptala in sev. diff. bushes.

Uoth.  $15 + 1874 = 1889$ .

Uth. ins.  $1 + 109 = 110$ .

1955.95 1st. RR. station west of  
Marathon (Altuda <sup>4605 ft.</sup>), Brewster Co., Texas.  
Elev. (~~chart from chart~~). VIII. 20. 1955. (R.)

Tall and dense grass and short grass on  
barren ground. Everything recog. taken  
except 1 Mermiria. ad.



1955. 95 (cont)

1 juv. Mermiria in tall grass.

Antecora very few adults - many juvs.  
in shorter grass.

Boopodon 1 juv. & all seen.

Trimastix pallid. one taken of several.

Tropidophus taken in more open  
ground with more scattered corn.

Melanophus lanius ads. & juvs. several  
in vegt.

.. long-w. sp. Hatto.

Phostolites a few juvs. only.

Hartylotum a single male in low growth.

Orth.  $32 + 1889 = 1921$ .

Uther vis.  $2 + 110 = 112$ .

↓ 1955. 96 6.5 ms. W. of Alpine, Brewster  
Co., Texas. Check for elev. (E. of Paisano Pass).  
VIII. 20. 1955. (R.).

Tall grass and patches of low native  
corn. Very little adult. Everything recogn.  
taken exc! 1 Mermiria.

Diapheromera 1 ♀ swept.

Boopodon no. juvs - 2 instars.

Melanophus lanius ads. & juvs. a number.

Phostolites no. juvs.

Orth.  $16 + 1921 = 1937$ .

Uther vis.  $1 + 112 = 113$ .



J  
1955.97 Paisano Pass, Presidio Co.,  
Texas. Elev. 5000 ft. VIII.20.1955. (R.)

Native grass com with scattered forbs  
and native low shrubs. Everything  
meagre. Taken.

Pseudoscorpion 1 ♂ mpt.

Aulocoma <sup>1 ad. ♂</sup> ~~grass~~, <sup>ditto</sup> ~~very~~ numerous.

Boopis very small juvs. only.

Syrphid sw. seen.

Tropidolophus 2 ♂, 1 ♀. in the same  
group of com, but apparently none  
~~were~~ They were not mated.

~~Hi~~ Arctomys, 1 juv. mpt.

Orth. ~~17~~ + 1937 = 1956.1957.

Orth. ins. 1 + 113 = 114.

---

1955.98 10.5 mi. N. of Marfa. Jeff Davis  
Co., Texas. Elev. <sup>ca. 4900 ft.</sup> ~~(check)~~ VIII.20.1955. (R.)

Sparsely low grass and very low and com  
on stony soil. Wind very high, from  
area nearby. All seen taken.

Boopis very small juvs. Aulocoma ditto.

Xanthippus 1 female from trap. surface-  
inhab. field.

Orth 5 + 1957 = 1962.

Orth. ins. 3 + 114 = 117

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↓ 1955.99 22 mo. WNW. of Marfa, <sup>Chap</sup>  
Presidio Co., Texas. Elev. (an.) 4600 ft.

VIII. 20, 1955. (R.)

Wet roadside (heavy rain on whole area  
sw. hours earlier). Tall grass and weeds.  
Very muddy, very little morning or sun.  
Thliaphidura, 1 juv.

Uperia 1 juv.

Bryodem 1 very small juv.

✓ Paronychia 1 ♀.

Aulacura 1 ad. ♀.

Orth. 5 + 1962 = 1967.

Orth. ins. 6 + 117 = 123.

↓ 1955.100 4 mo. E. of Van Horn, Culberson  
Co., Texas. Elev. circa 4000 ft. VIII. 21, 1955. (R.)  
Open strand of mesquite and Covillea on badly  
washed red silt and gravel. Almost nothing else.

Boottia none in Covillea, largely juv.

Orth. 9 + 1967 = 1976.

Orth. ins. 1 + 123 = 124.

↓ 1955.101 14 mo. E. of Van Horn (near  
Wild Horse), Culberson Co., Texas. Elev. (an.)  
3950 ft. VIII. 21, 1955. (R.)

Common various composites, black brush, mesquite,  
& Covillea. Very little O. - all seen taken.



18 Pseudoscorpion swept.

Bostellia a few - adts. - juvs. in Coriller

Ellichopetala - juvs. only - in two different species of plants.

Orth. 7 + 1976 = 1983.

Orth. ins. 9 + 124 = 133.

---

✓ 1955.102 1 m. E of Kent, Culberson Co., Texas. Elev. (an.) 4250 feet check. VIII. 21, 1955. (R.)

Coriller, black brush + tall grass + assoc. vegetation, little in flower.

Nothing in black brush. Everything recognizable.

Pseudoscorpion 1♂ + 1♀ swept separately.

Bostellia num. in Coriller

Juv. Melanophus swept finally.

Atilophus 1 ad. ♂ in Coriller.

Orth. 16 + 1983 = 1999.

Orth. ins. 0 + 133 = 133.

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1955.103 4.5 mi ENE of junction of U.S. 80 + U.S. 290, east of Pecos, Pecos Co., Texas. Elev. (an.) 3650 feet. VIII. 21, 1955. (R.)  
Very much sparsely and scattered corn with a few groups of tall brush grass, at a



1955. 103 (cont.)

Shallow wash drain under road.

Very little C.

Pseudomys ♂ & ♀ Taken separately in  
tall brush grass. 1 juv. also.

Reithrodontomys juvs only - 1 in low black brush,  
the other in tall <sup>rank</sup> grass in wash.

Utth.  $4 + 1999 = 2003$ .

Utth. in.  $2 + 133 = 135$ .

✓ 1955. 104 1.5 ms. E. of Toyah, Reeves  
Co., Texas. Elev. ca. 2800 ft. VIII. 21, 1955. (R.).

Roadside and wash vegetation. Short  
curly grass, tall brush grass, dense rank grass  
in wash and very low scattered cover in general.

Pseudomys in <sup>tall dry brush grass only.</sup> ~~various places~~.

Peromyscus 1 juv. taken.

✓ Peromyscus in both short curly and long  
brush grass, ad. & juvs.

Onychomys 1 juv. mpt.

Melomys pachardii type, 1 ♂ all seen.

Utth.  $24 + 2003 = 2027$ .

Utth. in.  $0 + 135 = 135$



✓ 1955.105 10 ms. S. of Pecos, Reeves Co., Texas. Elev. (an.) 2460 ft. VIII. 21, 1955. (R.)

Heavy mixed brush - shade oak, tall brush grass, flowering composites, low mesquite, Koberlinia and patches of a very low, close and mat-like com. Virtually no C. noted exc. Richoptala, which here was all adult, and in a variety of situations - grass, Koberlinia and composites. But 2 males seen, 1 lost.

Utah. 8 + 2027 = 2035,

Utah ins. 1 + 135 = 136.

✓ 1955.106 22 ms. SE. of Pecos, Reeves Co., Texas. Elev. 2725 ft. VIII. 21, 1955. (R.)

Relatively heavy mixed growth on gravelly silt. A few Covillea, many <sup>low</sup> composites, and a some of other components - <sup>almost</sup> no mesquite.

Boottellia a few in Covillea.

Tropidolophus all in or about a very low gray-green ground mantling plant - only one adult, but 2 imm. in 3 instances. <sup>thin color patches</sup> plant perfectly.



1955.106.

Juv. melanophids. swept.

" Phaenocarpa swept.

" Anthracus a number. swept.

Ichneumonidae, all seen juv. exc. 1 ♀ taken  
general in disk.

Cecanethus 1 swept.

Count.  $45 + 2035 = 2079$ .

Other ins.  $1 + 136 = 137$ .

1955.107 (2 mo. N.E. of fork of US. 290 - M. 67,  
18.3 ft. (Tulsa))  
" Pecos Co., Texas. Elev. 2800 ft. VIII. 22, 1955. (R.).  
Low roadside corr., mostly sparse. Almost  
no D. Everything recognizable. Taken exc. 1 Mermis.

Pseudoscorpion 1 juv. ♀. swept.

Cephus a few, 1 ad. • 1 juv. taken.

Juv. Trinervus.

" Melanophorus seen.

Cyclopterus sev. swept

Cecanethus "

Count.  $14 + 2070 = 2084$ .

Other ins.  $6 + 137 = 143$ .



1955.108 <sup>on US 67</sup> 10 ms. E. of junction of U.S. 290  
and US. 67 (E. of Ft Stockton), Pecos Co.,  
Texas. Elev. (an.) 2450 feet. VIII. 22. 1955. (R.)

Tall rank grass (roadside at wash) and  
spotty corn on more gravelly ground.  
Everything recognizable. Taken ex. 1 Mermiria.

1 juv. Pseudomugil crypt.

Uperia 1 Taken, all seen.

Boopis 1 juv., all seen.

Melanoplus luteus 1 ♂.

" sp. juv. merula.

Helichopitula 1 ♂ + 1 juv. - former  
had no hind legs when captured!

Urananthus, uv. crypt.

Orth. 12 + 2084 = 2096.

Orth. no. 0 + 143 = 143.

↓ 1955.109 5.5 ms. E. of Mc Carney,  
Lupton Co., Texas. Elev. (an.) 2350 feet. VIII. 22. 1955. (R.)

Tall grass and weeds in wash drain,  
and mesquite and black brush on gravelly  
soil. Everything recognizable. Taken ex. 1 Mermiria.

A few Goniateron <sup>(4) seen</sup> in the scattered black  
brush - two taken, these flushed on to  
ground and then captured. They were



1955.109 (cont.)

sought refuge in the dead burned land  
b. b. where roadside clearing had burned  
all except the trees.

Pseudomugil 1 ♂ nupt.

Opis 1 taken.

Campylorhynchus 1 ad. - sev. juvs. Taken.

Uta, a number nupt.

Utter. 13 + 2096 = 2109.

Utter ins. 0 + 143 = 143

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1955.110. 12.5 ms. E. of Rankin,  
Reagan Co., Texas. Elev. 2550 ft.  
VIII. 22, 1955. (R.)

Roadside tangles of heavy grass, low  
mesquite, cat-claw and black brush.  
All species nupt. Taken ex 1 Mermiria.

Pseudomugil ♂♂ - juv. ♀.

Paraidemna 1 taken.

Campylorhynchus 1 ad. - sev. juvs.

Melanophrynus sp. num. in var. plants -  
grasses, tangles preferred.

Phyllorhynchus sev. juvs.

Arthura 1 juv. nupt.



Helichrysetala few adults but num.  
juv. In broad variety of cover  
Ceanothus 3 mgt.

Orth 37 + 2109 = 2146.

Uther vis. 0 + 143 = 143.

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1955. 111 5.5 ms. E. of Barnhart,  
Irion Co., Texas. Elev. 2450 feet. VIII. 22, 1955. (R.)

Roadside weeds - mainly non-cudweeds.  
Very little O. - everything recognizable.

1 Mimulus.

Boopis 1 juv.

Meibomia fr. on tree pr.

Paropoma 1 juv. in tall grass.

Campylanthus 1 juv.

Helichrysetala 1 juv.

Orth 5 + 2146 = 2151.

Uther vis. 0 + 143 = 143

---

1955. 112 17 ms. ENE. of Barnhart,  
Irion Co., Texas. Elev. (an.) 2150 feet.  
VIII. 22, 1955. (R.)

Low and waist-high native com.  
curly grass. The two gray plant mentioned  
in yesterday's notes, and tall grass in



1955-112 (cont.)

in small wash. Everything recog. taken  
exc. 1 Mermiria.

Diapheromera ad. & juv. ~~many~~ numerous.  
Also juv.

Copeia a few.

Boreodon juv. only.

Agamotettix 1 taken.

Tropidolophus 1 ad. & juv. in at least two  
instars in same low gray green plants  
as noted yesterday.

Melanoplus lachinus numerous.

Arctocercus 1 ad. ♂ imp. Chalcid, one in  
low corner

Chalcid a number not quite adult.

Orth. 38 + 2151 = 2189.

Orth. vis. 0 + 143 = 143.

✓ 1955-113 1m. ENE. of Tankersley,  
Tom Green Co., Texas. Elev. 1800 ft.

VIII. 22, 1955. (R.).

Short-tall grass and low and tall  
crops. <sup>in field</sup> Everything recog. taken exc.

1 Mermiria - 1 ad. Synaldis.

Synaldis juv. taken.

Trimerotropis pallidus several seen, 1 taken.

" red-leg. 1 juv. taken.



Brichoptera 1 ♀ Taken, all seen.

Orth. 6 + 2189 = 2195.

Other ins. 12 + 143 = 155.

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1955.114 5 ms. NE. of San Angelo,  
Tom Green Co., Texas. Elev. (an.) 2750 ft.  
VIII.23, 1955. (R.)

Roadside tall grass and weed, some in  
runoff wet drain.

Everything recognized. Taken exc. 1 Melan.  
diff. = 1 ad. Campylac.

Diapheromera in tall rank grass.

Mermiria several.

✓ Paropomala 1 juv.

Campylacantha 1 juv.

Orth. 19 + 2195 = 2214.

Other ins. 3 + 155 = 158.

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1955.115 3 ms. ENE. of Harriett,  
Tom Green Co., Tex. Elev. (an.) 1640 ft.  
VIII.23, 1955. (R.)

Medium high dry grass, low mesquite,  
prickly pear, under scattered yucca-like  
mesquite. Everything seen taken.



1955 115 (cont.)

Diapheromera in var. bushes including  
low mesquite.

Mercuria actin, a number.

Syrphula ditto.

Trimeris, pallidipis, a few

Campylacantha 1 ad - juv. taken.

Melanoplus flavipes type sw.

Chrysotela 2 ♀ impt.

Cuth. 15 + 214 = 229

Cuth. var. 1 + 158 = 159

✓ 1955. 116 .8 m. E. of Benoit, Runnels  
Co., Texas. Elev. (am.) 1500 ft. VIII. 23, 1955.  
(R.)

Roadside tall growth, thistle, sunflower.

Sandspur, low mesquite & small composites.

All species recog. taken.

Diapheromera in var. things.

Mercuria ad. & juv.

Syrphula numerous, adts.

Epia 1 taken.

Azucena 1 taken.

Campylacantha 1 ad. taken.

Melanoplus diff. a few

" pallidipis a number.

" Th. w. species not numerous.

Conoph thritus a few in tall grass.



Hicropetala in vicinity of vegetation

Quanthus funeral ranging.

Alt. 41 + 2229 = 2270.

Alt. vis. 0 + 159 = 159.

† 1955.117 2 ms. W. of Valera, Coleman  
Co., Texas. Elev. (ann.) 1760 feet. VIII. 23,  
1955. (R.)

Roadside, on one side disturbed corn  
with weed corn, on the other native  
corn. Everything recognizable. Taken

Pseudoceryle in native corn.

Hydula admi. in disturbed corn.

" native sp. in native corn.

Agrostis in the p. in native corn.

Merminia funeral.

~~7~~ Hadrotettix broad ranging,

landing in lower areas.

Campylacanthus, 1 in tall grass.

Acrotylus spec. in tall grass  
in dist. corn.

Mel. diff. ditto.

~~Quanthus~~ night.

Alt. 17 + 2270 = 2287.

Alt. vis. 1 + 159 = 160



✓ 1955: 118 5 mo. S.E. of Coleman, Coleman  
Co., Texas. Elev. (am.) 1550 ft. VIII. 23, 1955.

At roadside park. Native low corn, 1/2 R,  
under scattered mesquite. Many  
composites, prickly pear, etc. Everything  
magn. taken esp. 1 Mel. diff.

Pseudoscorpion num. ♂♂ - juv. ♀♀.

Syrphula few. 1 juv. Taken.

Cephus a fair no.

Agrostis ditto.

Platylabus 2 seen on bare areas, not taken.

Trimerotropis - red leg. 1 Taken, all seen.

Coccoph. campylorhynchos chiefly juv.

Melanoplus th. - w. species. ♂♂. ♀ taken

Urocyon all seen, ♂♂, ♀ taken top.

Paraidemna not numerous.

Urocyon Michopitula general in  
both brush & grass, but 1 male taken.

Rehnia nitens, 1 ♀ swept from  
low corn, but near mesquite tree.

Quercus swept.

Orth. 39 + 2287 = 2326

Urocyon 1 + 157 = 160



1955.119 4 ms. SSW of Brownwood,  
Brown Co., Texas. Elev. (an.) 1420 ft.  
VIII. 24, 1955. (R.)

Almost nothing. Roadside, mainly  
woods. 1 ♂ Pseudomys 2 juv. Peromyscus.  
1 juv. Sylvia 1 Alcedo.

Orth. 6 + 2326 = 2332.

Other vis. 0 + 160 = 160.

↓  
1955.120 8 ms. SSW of Brownwood,  
Brown Co., Texas. Elev. (an.) 1340 ft.  
VIII. 24, 1955. (R.) Limestone surface.  
Roadside, part tall rank grass, then low  
grass and shrub com. Anything recognizable  
taken exc. 1 Phrynosoma.

Pseudomys both sexes adult, in grass.

Sylvia adu. not seen.

Meromys a number.

Trinectes red-legged, a few on  
bare spots, 2 taken.

Hadrotellus a few, very active.

Aspidotellus speciosus a few.

Campylanthus not seen, also - juv.

Melanoplus diff. a few.

" pachardi a number.

" flavus type, sev. Taken



1955.120 (cont.).

Arctura 1♂, 2♀, swept singly, all seen.  
Acronyctus swept.

Orth. 33 + 2332 = 2365.

Other ins. 2 + 160 = 162.

↓ 1955.121 1 m. S. of Wichita, McCulloch Co.,  
Texas. Elev. (an.). 1120 ft. VIII. 24, 1955. (R.)  
Roadside, largely native cover. Everything  
recognized taken.

Diapheromera 1♂ = 1 nearly ad. ♀.

Synchlora a few.

Mermiria common.

Platylabus sp. seen on lower spots, 1 taken.

Melanophila sp. a few seen, 2 ♀ taken.

Arctura 1♀ swept.

Orth. 11 + 2365 = 2376.

Other ins. 0 + 162 = 162.

↓ 1955.122 3 ms. NE. of Brady, McCulloch  
Co., Texas. Elev. 1700 ft. (an.). VIII. 24, 1955. (R.)  
Roadside native cover on broken  
limestone. Everything recognized taken etc.  
1 banded Trimerotropis, approx. same as  
taken at 1955.120.



Pseudomyle abundant, that is 55,  
mpt generally.

Agrotis few.

Melanoplus parkardi none.

" other species. 1 taken.

Arctia mpt.

Orth. 21 + 2376 = 2397.

Other ins. 0 + 162 = 162.

---

✓ 1955. 123 8.5 mi. S. of Brady,  
Mc Culloch Co., Texas. Elev. 1550 ft  
VIII. 24, 1955. (R.)

Native dried corn and some Fall  
grass - weeds apparently abundant. Every-  
thing recogn. taken exc. 1 Chrysomelid.

Pseudomyle and Diapheromera in  
numbers, females much fewer.

Trinotus pallid. a few.

Melanoplus calvus 1 taken.

Arctia mpt (2) from Fall native  
grass.

Orth. 11 + 2397 = 2408.

Other ins. 3 + 162 = 165

---



✓ 1955: 124 . 5 m. S. of Loyalt Valley,  
Marion Co., Texas. Elev. (am.) 1350 ft.  
VIII. 24, 1955. (R.).

Largely native corn, much wheat high -  
with joint cactus, prickly pear and  
numerous low yuccas.

All recogn. taken ex c. 1 ad. Podiceps

Burmannia 1 ♀ nupt.

Antennaria 3 juvs. nupt.

Heptameris 3 ♂ nupt.

Pseudomyle juvs. nupt.

Syntherisma 1 ♀ taken.

Dichromyia 1 taken.

Melanoplus sp. 1 juv.

Campylorhynchus n. juvs. taken.

Arctophila 1 ♀ nupt.

Birth. 17 + 2408 = 2425.

Altitude. 0 + 165 = 165.

✓ 1955: 125 4 ms. S S E. of Cherry Springs,  
Gillespie Co., Texas. Elev. (am.) 2000 ft.  
VIII. 24, 1955. (R.)

Area of partially native corn, with  
yucca, prickly pear, etc., but penetrated  
by sandpiper, etc. Almost no Q. except



pharmids.

Pseudomugil both sexes, note color pattern of ♀ & ♂ here.

Diapheromera both sexes, ♀ & ♂ not quite adult.

Paraidemona 1 spec. - Taken.

Uca 1 spec.

Orth. 19 + 2425 = 2444.

Orth. no. 0 + 165 = 165.

1955:126 3 mi. E. of Fredericksburg,  
Gillespie Co., Texas. Elev. (am.) 1450 feet  
VIII. 25. 1955. (R.)

Very little - very thing recognizable taken ex 1 Merm. list.  
Roadside - short & med. high grass - much  
sandspur.

Synaldis, a few.

Ageneotriton - 1 taken

Uta - juvs. only.

Orth. 10 + 2444 = 2454.

Orth. no. 0 + 165 = 165.



1955. 127 1 m. E. of Hye, Blanco Co., Texas.  
Elev. (an.) 1260 ft. VIII. 25, 1955. (R.)  
Very little. Everything recogn. taken exc.  
1 *Schistocerca*.

Roadside. grass and bare spots on limestone.

*Syrphula* juv. only seen.

*Opis* juv. only.

*Trinervus* red-leg *Spharagemon* on almost  
bare limestone grit.

*Ucauthus* <sup>*Schistocerca*</sup> 1 juv. taken  
empt.

Orth. 5 + 2454 = 2459.

Orth. ins. 0 + 165 = 165.

---

✓ 1955. 128 Hills 4.5 ms. S. of Johnson  
City, Blanco Co., Texas. Elev. (an.) 1210  
ft. VIII. 25, 1955. (R.)

Limestone surfaces with open stand  
of native vegetation. Everything recogn.

taken.

*Pseudoscorpion* Both sexes, juvs.

*Syrphula* western sp. 1 ♂, 1 ♀ taken.

*Prolocosa* 1 very small juv.

*Chortophaga* 1 taken.

*Trinervus* pallid. 1 taken

" thin-legged. 1 ♂, 1 ♀ taken.

*Platyloctista* 1 taken



Paraidemna 1 ♀ Taken.

Cycloptilum ov. rupt.

Uranium 1 rupt.

Orth. 19 + 2459 = 2478.

Orth. no. 0 + 165 = 165.

---

↓ 1955:129 3 ms. SE. of Blanco, Blanco  
Co., Texas. Elev. (an.) 1075 feet. VIII.25, 1955. (R.)

Grassy roadside. Everything recognizable.

Taken etc. 1 far flying Schistocerca.

Pseudomyle juv. only.

Syrphula <sup>ad.</sup> juv.

Enoplophorus 1 taken.

Spharagemon 1 taken, another seen.

Schistocerca 1 juv. taken.

Hesperotettix viridis type 1 ♀ taken, <sup>seen.</sup>

Cycloptilum 1 rupt.

Uranium rupt.

Orth. 16 + 2478 = 2494.

Orth. no. 1 + 165 = 166.

---



✓ 1955. 130 8 ms. S.E. of Blanco, Blanco Co., Tex.

Elev. (an.) 900 ft. VIII. 25, 1955. (R.)

Native grass and taller corn on limestone. Everything recognizable taken.

Heapheromera ♂ ad. & juv. in grass.

Syrphula few.

Anthropodidae juvs. only, none.

Mesochorus 1 juv. taken

Hippisus 1 on pr., all seen.

Anthaxia 1 ♀ none.

(Melampus sp. (H.W.)  
1 ♂ taken.)

Conocoryphus juv. only.

Units 13 + 2494 = 2507

Other ins. 0 + 166 = 166.

✓ 1955. 131 4 ms. S.E. of Fischer, Comal Co., Tex.

Elev. (an.) 900 ft. VIII. 25, 1955. (R.).

Native corn with much <sup>low</sup> guava.

Everything recognizable taken.

Pseudomyia and Heapheromera,  
numerous males, no adult ♀♀ seen.

Syrphula 1 juv. taken.

Mesochorus juvs. only.

Hippisus 1 taken, all seen.

Chistocampa 1 juv. taken.

Anthaxia 1 ♂ none.



Cyrtopogon a few swept.

Orth.  $28 + 2507 = 2535$ .

Orth. ins.  $0 + 166 = 166$ .

---

1955. 132 11 mo. W. of San Marcos,  
Hays Co., Texas. Elev. (an.) 650 ft. VIII. 25, 1955.  
(R.)

Roadside short grass with some taller  
brush grass. Everything very dry. Mermiria  
taken.

Pseudoceryle juvs. only

Syrphula juvs.

Microchloa nr. adults.

Orth.  $7 + 2535 = 2542$ .

Orth. ins.  $0 + 166 = 166$ .

---

↓ 1955. 133 4 mo. W. of San Marcos,  
Hays Co., Texas. Elev. (an.) 600 ft. VIII. 25, 1955.  
(R.)

Native corn of tall grass and shrubbery.  
Exc. for 1 Mermiria nymph. very dry was  
taken.

Pseudoceryle - Diapheromera ♂♂  
numerous, particularly the latter, ♀♀  
not adult as yet.

Stagnonantis juvs. taken.

Chironomus nr. juvs. swept.



Syrphula adults.

Paraidemona 1 taken.

Melanoplus robustus? high male in  
heaviest corn.

Melanoplus h. w. both sexes - local.

Anthracus 1 ♀ nupt.

Oreanthus nupt.

Orth.  $35 + 2542 = 2577$ .

Other ins.  $0 + 166 = 166$ .

---

1955. 134 16 ms. NE. of San Marcos,  
Caldwell Co., Texas. Elev. (check!)  
VIII. 26. 1955. (R.). Ca. 560 ft.

Roadside tall grass - rank weeds.

Nothing seen exc. what was taken.

Juv. phasmid.

" Stagnomantis

Campylodes 1 ♂.

Orth.  $3 + 2577 = 2580$ .

Other ins.  $1 + 166 = 167$ .

---

1955. 135 6 ms. WSW. of Cedar Creek <sup>Spring</sup>,  
W. of ~~W. of~~ Bastrop Co., Texas. Elev. (check!) Ca. ~~400 ft.~~  
VIII. 26, 1955. (R.)

Area of shrubs, grass - low weeds, surrounded  
by mixed low woods.  
Everything recognized taken.



Pseudoceryle 1 ♀ impt.

Syrphula Common.

Urophysalis 2 ad. - 1 juv.  
Boopisodon 1 ♂ taken.

Daphnia a number from taken.

Chortophaga - 1 taken.  
Encyrtophanes a single one taken.

Melanophus th. w. sp. 1 ♂ taken.

" juv. sp.?

Paraidemona 1 taken.

Anthracis 1 ♂ impt.

Conocéphalus 1 ♂ impt.

Orth. 28 + 280 = 2608.

Orth. ins. 0 + 167 = 167.

1955. 136 6 ms. NE. of Cedar Creek.

Bastrop Co., Texas. Elev. (about)

VIII. 26, 1955. (R.)

Watin tall grass + shrubbery  
with oak scrub, along with chuff  
Edge of open pine woods (approx. 100 ft  
long), in grass and other low cover.  
Oak forest, anything more.

Everything more. Taken etc. 1 Daphnia.

Pseudoceryle 1 ♀ juv.

Syrphula numerous.

Anthytropidea very orn. juv.

Porosoma very small juv.

Aganotellus 1 taken.

Chortophaga not taken.

Spharagemon 1 on lower ground.



1955-136 (cont.) Melanophus th. w. sp.  
Schistura 1 juv. 1 ad. ♂ imm. juv.

Arctura 1 ♀ impt.

Oecanthus 1 impt.

Orth.  $29 + 2608 = 2636$ .

Other in.  $0 + 167 = 167$ .

---

1955-137 2 ms. N.E. of Bastrop, Bastrop  
Co., Texas. Elev. <sup>ca. 550 ft.</sup> ~~chick~~. VIII. 26. 1955. (R.)

Edge of open pine woods (appar. not  
long-leaf pine), in grass and then  
low corn. Everything recogn. taken exc.

1 Arctura.

Pseudoeurycea 1 ♂ - 1 juv.

Hemiphragma 1 ♀.

Chrysomela 1 taken.

Orth.  $5 + 2636 = 2641$ .

Other in.  $0 + 167 = 167$ .

---

1955-138 Manheim, Lee Co., Texas.

Elevation ~~chick~~. VIII. 26. 1955. (R.)

In grass and low corn under open  
old woods. Everything recogn. taken.

Hemiphragma 1 ♂ Taken.

Pseudoeurycea juv. taken.



Syrphula numerosus.

Mercuria a few.

Ceratomyza 1 juv. taken.

Cyphodactylus ad. - 1 juv. taken.

Hippodamia red. seen - taken.

Melanophus the w. with red ad. - juv.

taken - local.

Melanophus long-w. a single ♀ seen -  
taken. No male could  
be located.

Uth. 26 + 2641 = 2667.

Uth. ins. 0 + 167 = 167.

1955. 139 5 ms. NE. of Old Mine Box,  
Burleson Co., Texas. Exam? VIII. 26, 1955.  
(R.)

Old field with much tall grass and dry  
drain with <sup>very</sup> rank grass. Everything  
mown. Taken etc. Mercuria.

Brumelia 1 ad ♀ + 1 juv. ♀. (not in  
drain grass!)

Syrphula ad. + juv.

Melanophus juv.

Neonoecephalus 1 ♀ (not in drain grass)

Uth. 6 + 2667 = 2673.

Uth. ins. 0 + 167 = 167.



✓

1955. 140 6.5 mo. NE. of Bryan, Brazos  
Co., Texas. ~~Ex. 140~~ VIII. 27, 1955. (R.)

Roadside in oak woods area, also dry  
drain with much tall grass - then area  
mowed. Everything recognized. Taken exc. 1  
*Aphidius*.

*Braconia* 1 ♀ ad. impt.

*Syrphid* imm. ad. - juv.

*Mormonia* very few.

*Hippisus* a few, one taken.

*Melanophus* th-w. a few. 1 taken.

" *diff.* 1 taken, all seen.

" *whistler?* 1 ♀, in heavy tangle.

*Anthracoceros* 1 ♂ impt.

*Uromyphalus* 1 juv.

Orth. 11 + 2673 = 2684.

Other ins. 4 + 167 = 171.

✓ 1955. 141 5.5 mo. NE. of Madisonville,  
Madison Co., Texas. ~~Ex. 141~~  
VIII. 27, 1955 (R.)

Short grass with scattered bunch grass under  
open stand of oaks. Everything recognized  
taken.



Stagmomantis 1 juv. taken  
Diapheromera 1 ♂ all taken.  
Pseudomyle num. no y & p adult.  
Syrphula num. ad. - juv.  
Cephus a few, adults - juv.  
Meachina in low corn, a few.  
Chortophaga 1 taken  
Trachytachis 1 juv. taken.  
Hesperus both sexes taken.  
Campylacanthus 1 juv. taken.  
Melanophus l. w. 1 ♂ taken

" h. w. locally common, but  
 only in a very small area of  
 tamped corn.

$$\text{Cuth.} \quad 55 + 2684 = 2739.$$

$$\text{Cuth. ins.} \quad 0 + 171 = 171.$$

↓ 1955 142 1 m. NE. of Sand Ridge,  
 Houston Co., Texas. Aug. VIII. 27. 1955. (R.)

Road mowed grass along old field.  
 Virtually nothing, everything very taken.

Syrphula a few.

Cephus ad. - juv.

$$\text{Cuth.} \quad 11 + 2739 = 2750.$$

$$\text{Cuth. ins.} \quad 0 + 171 = 171$$



✓ 1955. 143 Antonio, Houston Co., Texas.  
~~Exuv.~~ VIII. 27. 1955. (R.)

Roadside park. grass and shrubbery of  
various sorts under open stand of oaks.  
Very poor. Nothing recognizable other than forms  
taken.

Pseudoscorpion 1 ♂.

Elaphidromus 2 juvs.

Syrphula num., ad.: juvs.

Urophylloides ad.: juvs.

Neurocrassus 1 juv. Taken.

Orth. 13 + 2750 = 2763.

Orth. vis. 0 + 171 = 171.

✓ 1955. 144 1.5 ms. N. of Lathrop, Houston  
Co., Texas. Elev. 400 ft. VIII. 27. 1955. (R.)

Roadside grass and weeds, tall grass,  
short grass, some sandspur, also dry  
sandy drain.

Elaphidromus 1 juv. ♀.

Syrphula a few

Agrotis 1 Taken.

Hippodamia 1 of sp. taken. Urophylloides juvs. only.

Chortophaga 1 Taken.



Trachyrhachis tw. ad. - 1 juv. in drain, other  
two <sup>lost</sup> by lost.

Conusphalus 1 ♂ taken.

Uca 1 imp.

Orth. 16 + 2763 = 2779.

Orth. ins. 0 + 171 = 171.

---

1955.145 4 ms. N. of Grapeland,  
Houston Co, Texas. Elev. 500 ft.  
VII. 27. 1905. (R.)

Old field, grown up in tall grass and  
many kinds of weeds, everything recognizable.  
Taken. Crinoid

Synchlora - western species - 1 female.

Chrysomelid ad. ♂ & ♀.

Pseudocorymbus tw. ♂ only.

Campylacanthus 1 female ad. - juv.

Melanophus C. W. sp. Numerous.

" C. W. sp. In fair no. - local.

Uca 1 imp.

Orth. 26 + 2779 = 2805.

Orth. ins. 1 + 171 = 172.

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✓

1955.146 3.8 ms. N. of Atlanta, Cass Co., Texas.

Elev. ca. 350 ft. VIII. 28, 1955. (R.).

In interval of rains. Broad hollow  
with both short grass (partly mowed) and  
tall grass, and weeds. Everything  
mown. Taken exc. Cephia + ad. Schistocerca.  
Brunneria 2 ♀♀ mpt.

Syrphula abundant.

Chrysobothris 1 Taken.

Agrotis 1 Taken.

Melanoplus l. w. sp. 1 ♂ 1 ♀, others noted.

Oecanthus <sup>th. w. sp.</sup> m. mpt. 1 ♂ Taken.

Orth. 17 + 2805 = 2822.

Other ins. 0 + 172 = 172.

✓

1955.147 6 ms. E. of Texarkana, Miller Co.,

Arkansas. Elev. ca. 350 ft. VIII. 29, 1955. (R.).

Tall grass and weeds, but native corn,  
along edge of mixed woods, on red clay.

Everything mown. Taken exc. Cephia.

Syrphula a few.

Melanoplus th. w. in  
a variety of spots.

Amblycorypha 1 ♀ mpt.

Brunneria 2 ad. - 3 juv. <sup>that I ♀</sup>  
Taken in tall rank grass, a weed;  
Diapheromera juv.



Orth. 14 + 2822 = 2836.

Other ins. 0 + 172 = 172

✓ 1955. 148 6 ms. E of Garland, Lafayette  
Co., Arkansas. Elev. ca. 230 ft. Vill. 29. 1955.  
(R.)

⊗ Roadside rank weeds and grasses  
and border vegetation of dense mixed  
woods. Everything recogn. taken etc.

Aephia. Rain threatening momentarily

Chiaephennura 2 ♂ - 1 juv. ♀.

Brummaria 1 ad. ♀. Taken.

Syrphula a few.

Cephulella 1 juv. Taken.

Melanophora l.w. 1 ♀ Taken.

Campylacanthia 1 ♀ Taken.

Aeshlinum juv. 1 Taken

Conophalus juv. several Taken.

Orth. 12 + 2836 = 2848.

Other ins. 0 + 172 = 172.



1955.149 5 ms. <sup>SE.</sup> S.E. of Linwood  
Jefferson Co., Arkansas. <sup>Co. 180 ft.</sup> VIII. 30, 1955. (R.)

Flats along Arkansas River roadside.  
Everything wet and little work could be attempted,  
and almost nothing would move. Work  
attempted in roadside grass and weeds  
and old field. Everything recognized taken.

Hippiscus sp. taken, others seen.

Conocoryphus fasc. 2 ads. taken, imm. juvs. seen.  
Coth.  $4 + 2848 = 2852$ .

Other ins.  $0 + 172 = 172$

1955.150 3 ms. S.E. of Gould, Hecha Co.,  
Arkansas. <sup>Co. 160 ft.</sup> VIII. 30, 1955. (R.).

Low bottomland grown up in various  
weeds & tall grasses. Everything recog.  
taken exc. Hippiscus.

Tettigidea ads & juvs. in better spots.

Elischromypha both sexes taken.

Lythula 1 ad. taken.

Melanophus fuscus-rufus - a few.

Panysa hirsuta 1 ♀ - no more seen.

Archelimum vulgare 1 ♀.

" negipes 1 ♂ taken.

" lythraeum? Both sexes taken.



Cremyphalus fasc. a num.

" striatus abund.

Urch. 44 + 2852 = 2896.

Urch. ins 0 + 172 = 172.

---

✓ 1955.151 7.5 ms. S. of Mc Gehee, Chicot  
Co., Arkansas. <sup>ca. 50 ft.</sup> Vill. 30, 1955. (R.)

Roadside with heavy grass and water <sup>plants</sup>  
of other character, with standing shallow  
water along hard wood forest largely  
in water! Everything noticed taken.

Tetligidea numerous, ad. imm.

Chironomus sp. taken.

Hippisus one on drier section.

Cremyph. fasc. numerous.

" striatus sp. taken.

Lythra in deep grass.

Urch. 28 + 2896 = 2924

Urch. ins. 0 + 172 = 172.

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✓ 1955.152 <sup>near Valley Hill School.</sup> 9 ms. E. of Grummond, in  
Carroll Co., Miss. <sup>Elev. 170 ft.</sup> VIII. 31, 1955. (R.)

On top of ~~cardinal~~ western border of bluffs.  
Everything recognizable. Taken. In tall grass and  
woods and in low grass.

Braconria in all situations. Adults - given  
in two instars. Note the one brown given!

Syrphula 1 taken.

Mermiria 1 ♀ taken, all over.

Melanophus 1 given.

Chalcidius 1 ♂.

Urch. 14 + 2924 = 2938.

Urch. vis. 0 + 172 = 172.

✓ 1955.153 2 ms. S.E. of Carrollton, Carroll Co. ~~Miss.~~  
Miss. VIII. 31, 1955. (R.)

Narrow roadside border and in heavy  
mixed oak + pine woods on rolling  
hills.

Braconria roadside in mixed grass + woods.

Chalcidius in woods. ♂ with requested  
fore leg. ♀♀ all given.

Spharagmus 1 shot w. Melan. in low woods  
com.



Cremoph. stritatus roadside pass.

Uoth. 10 + 2938 = 2948.

Uethen ins. 0 + 172 = 172.

---

1955.154 7.5 ms. E. of Winona, Montgomery  
Co., Miss. VIII.31.1955. (R.)

Undergr. in pine woods and roadside  
woods and tall grasses. Exanth. rugu.  
Fahn. ~~see. Phac. d. d. d.~~

Andlytropidia juv. in woods undergr.

Synula 1 Fahn, roadside.

Chortophaga roadside. <sup>Urethrella 1 juv. roadside.</sup>

Hippiscus 1 roadside.

Melanoplus juv. roadside.

Schistocerca juv. roadside

Neurochus 1 juv. in woods undergr.

Uoth. 8 + 2948 = 2956.

Uethen ins. 0 + 172 = 172.

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1955.155 2 ms. E. of Mathiston,  
Cattibaha Co., Miss. VIII.31.1955. (R.)

In ground corn of round-grain mixed,  
but chiefly oak, woods, and in roadside  
short grass, tall grass - some woods.



1955. 155 (cont.).

Everything recogn. Taken.

Brunneria, roadside.

Elepheronema ♀ juv. in woods.

Lybula roadside. — Metastephan 1 juv roadside pass.

Anthytoides juv. num. in woods.

Melanophus juv. roadside.

^ mus. 1 ♂ roadside.

Campylacantha 1 ♂, roadside.

Adontophidium 1 ♂, in roadside front pass.

Urob. 18 + 2956 = 2974.

Urob. ins. 1 + 172 = 173.

✓

1955. 156 12 ms. E. of Mathiston, Wabasha  
Co., Miss. VIII. 31, 1955. (R.)

Ground cover of mixed woods (mainly  
oak), and in roadside + ditch with  
grasses and weeds.

Everything recogn. Taken. Nothing at  
all in woods.

Tettigidea numerous in one type roadside  
area (a dried-up damp spot).

Neotettix 1 near same area but much denser

Cryptobella ads. — juv.

Lybula a number.

Metastephan several juv.



Chortophaga 2 very sm. imm. taken.  
Aphidius 1 taken.

Hippiscus a pair taken.

Melanophus mix. 1 ♂.

Campylacantha 1 ♀ taken.

Turdus 1 ♂ tall under.

Odontomyia 1 ♂ roadside.

Uth.  $29 + 2974 = 3003$ .

Uth. no.  $1 + 173 = 174$ .

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1955. 15-7 8 ms. W. of Columbus,  
Lowndes Co., Miss. VIII. 31, 1955. (R.)

Very heavy, <sup>high</sup> and dense roadside tangles  
of rank grasses and trailing mimosaecous  
vines - a tangle of the tighest character.

Everything except taken etc. 1 sch. amer.

Aphidius 1 taken.

Chortophaga rural.

Conoclyptus strictus 1 ♂, 1 ♀.

" fac. minor.

Uth.  $9 + 3003 = 3012$

Uth. no.  $0 + 174 = 174$

---



1955.158 4 ms. E. of Mississippi line,  
Pickens Co., Ala. IX.1.1955. (R.)

Old field conditions, roadside -  
border of mixed woods. Everything  
recogn. taken exc. ad. Schist. amer.

Neppisus 1♂, 1♀. taken.

Trimerotrop. citrinus one on road gravel, all  
Schist. amer. juv.

Melanoplus fuscus-rufus } Anthropodidae: juv.  
" Aptanis } In same old field  
condition

" Th. w. one along work edge.

Neomorph. 1 juv. in weeds.

Oecanthus imp.

Utah.  $14 + 3012 = 3026$ .

Other no 3 + 174 = 177.

---

1955.159 4 ms. SE. of Ethelsville, Pickens Co.,  
Ala. IX.1.1955. (R.)

In very tall grass and weeds. Very little,  
all taken recogn. exc. ad. Schist. amer.

Bumelia in grass - weeds. (see on)

Neotettix on bare soil.

Syrphula, a few.

Anthropodidae: juv.

Schistocerca amer. juv.



Melanoplus ferrugineus - return - few.

" short-wing. 8 taken, all m.

Odontoxiphidium 1 ♀ in shorter grass.

With. + =

Other in. 1 + =

Melanoplus mex. a few.

Quercus 1 rupt.

With. 4 + 3026 = 3030.

Other in 0 + 177 = 177.



✓

1955-160. 1 m. W. of Reform, Pickens  
Co., Ala. IX. 1. 1955. (R.)

Roadside + cut-over pine land. Everything  
recogn. taken except ad. Schist. amer.

Brunnaria in grass - water can in  
grown-up cut-over pine land.

Neotettix on large soil

Syrphula, a number.

Embleptopidius juvs. numerous.

Schist. amer. juvs.

Melanoplus fenn-robersoni few

" Th. w. ♂ taken all over.

Admetixiphidius 1 ♀ in thicket grass.

Orth. 12 + 3030 = 3042.

Orth. ins. 1 + 177 = 178.

✓ 1955-161 4 ms. E & E. of Gordo, Pickens  
Co., Ala. IX. 1. 1955. (R.)

Roadside park, under open pine-oak  
woods. Work done there and in adjacent  
old field conditions. Everything recogn.

taken ex. ad. Sch. amer. + ad. Sundaria.

Brunnaria 1 in old field sand.

Syrphula almost funeral.

Therminia 1 ♂, all seen.

Orythulidia, a few.



Amblytropidia juv. 1 taken

Argonia a few, 2 taken

Hippiscus ditto, 1 taken.

Schistocerca amer Juss. taken, var.

color phases.

" clavifera 1 ♂ taken, all recogn.

Campylacanthus 1 ♂ ad. taken.

~~Orth.~~ Conocephalus tristis 1 ♂ taken.

Orth.  $28 + 3042 = 3070$ .

Orth. mus.  $0 + 178 = 178$ .

↓  
1955.162 5 ms. SE of Tuscaloosa,  
Tuscaloosa Co., Ala. <sup>elev. 350 ft.</sup> 1 X. 1. 1955. (R.)

Edge of mixed woods with low  
original ground cover undisturbed in  
spots. Everything recogn. taken.

Neotettix on clayey or gravelly ground,  
generally bare, otherwise with thin blanket  
of lichens(?).

Neotettix, same situation.

Urophysalis 1 juv. taken.

Amblytropidia, a number of juvs.

Chortophaga 1 ad. + 1 juv. taken.

Schistocerca amer. 1 femoral adult taken.



1955-162 (cont.)

Melanophus formicivorus mex. 1 ♂ taken.

Sitta 1 ♂ taken, numerous  
others seen.

Neomorph 1 juv. nupt.

Count.  $24 + 3070 = 3094$ .

Other inv.  $1 + 178 = 179$ .

---

✓ 1955-163 3/4 m. SE. of Pearson, Bibb Co.,  
Ala. 12.1.1955. (R.) 4.330 p.m. [Pearson is just on  
Tuscaloosa Co. line]  
Old field conditions along roadway and  
R.R. right of way. Everything recognizable. Taken!

Neotoma 1 taken.

Ceryle 1 taken.

Amphispiza juv. 1 taken.

Mimus 1 ♀, all seen.

Melanophus mex. numerous.

Conocorypha fasc. 1 taken.

Neomorph. 1 juv.

Oenanthe nupt.

Count.  $14 + 3094 = 3108$ .

Other inv.  $1 + 179 = 180$ .

---



1955. 164 3 ms. NE. of Centerville, Bibb  
Co., Ala. 1x. 2. 1955. (EANNIN) (R.)

Roadside and border of, and within, mixed  
woods.

? Radiolatum - like juv. a few in woods  
low com.

Syrphula numerosa.

Cerphulilla <sup>unsp.</sup> ~~unsp.~~ edge - roadside.

Amblytropidia juv. num. wood-edge & in  
woods.

Chortophaga 1 juv. roadside.

Wippiscus 1 taken, roadside.

Chistocerca 1 roadside - others num.

Melanoplus sp. roadside

" th. w. 1 ad. & 1 juv. in woods.

Neapenthes luripennis 1 f. <sup>at woods border</sup> ~~on roadside~~  
~~can of native plants~~ in oak scrub com.

Orth. 24 + 3108 = 3132.

Cater. vis. 0 + 180 = 180.

1955. 165 2 ms. ENE. of Calera,  
Shelby Co., Ala. Elev. ca. 540 ft.

1x. 2. 1955. (R.)

Roadside, edge of mixed woods (oak  
& pine) and within latter.



1955. 165 (cont.)

Anthytropidia juv. in both woods and  
along edge of same.

Chortophaga 1 juv. roadside.

Melanophus mex. roadside.

" Ph. w. in woods, 1 juv.

Conocoryphus tristis 1 ♂ roadside.

Odontoxiphidium 1 ♂ in woods edge.

Nesomorph. 1 juv. roadside tall grass

Urbs. 16 + 3132 = 3148.

Urban ins. 0 + 150 = 150.

↓  
1955. 166. Near Wilsonville, 6 ms. NE. of  
Columbiana, Shelby Co., Ala. Elev. ca. 420 ft.  
IX. 2. 1955. (R.)

Roadside and unimproved railroad  
right of way. Everything recognizable taken.

Brunneria in tall weeds - all seen.

Urophila juv. only taken.

Hippisus 1 taken, sev. seen.

Schist. amer. 1 taken, a number seen.

Melanophus mex. abund.

Nesomorph. 1 juv. taken.

Oecanthus rapt.

Urbs. 10 + 3148 = 3158.

Urban ins. 3 + 150 = 153.



1955.167 8.5 ms. NNE. of Vincent,  
St. Clair Co., Ala. Elev. ca. 480 ft. IX. 2. 1955 (R)  
Roadside tall weeds and grass + border  
of, and within, mixed woods. Very  
little.

Amblytropidia juv. in or on border  
of woods.

Hesperotettix trisp. 1♀ in corner  
on along wood edge.

Scudderia num. in tall weeds  
roadside - flying into woods.

Count. 8 + 3158 = 3162.

Other inv. 0 + 183 = 183.

↓  
1955.168 7 Hills 10 ms. SW. of Asheville,  
St. Clair Co., Ala. Elev. ca. 700 ft.  
IX. 2. 1955. (R.)

Edge of woods - largely pine - and  
roadside.

Amblytropidia juv. under edge.

Hydrula roadside.

Hyppis roadside.

Melanophus var. roadside.

" th. w. 1 juv. woods.

" lunatus 1♀ woods.



1955.168 (cont.)

$$\text{List. 11} + 3162 = 3173.$$

$$\text{Other circ. 0} + 183 = 183.$$

---

Total for season.



18th July 1964

18th July 1964

18th July 1964

18th July 1964















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1956 1 9 ms N of Yankton, Yankton Co,  
So. Dakota. VIII. 1, 1956. (R) Elev. an  
OK. 1250 ft (set at 1200 at Yankton) so correct  
later. Spitting mist.

Roadside weeds of various species bordering  
a corn field. Very little O. Agrostoides or  
adults on ground. <sup>between low corn</sup> Mel sp. all juvs. Acronyctus  
adults swept.

$$\text{Orth. } 6 + 0 = 6$$

$$\text{Other ins } 4 + 0 = 4$$

1956 2 1.5 ms. S. of Stanley Corners, E. of  
Bridgewater, McCook Co, So. Dakota.  
VIII. 1, 1956. (R) Elev 1400 on Yankton trail  
[see above].  
Uncast. Few things adult. Everything in  
roadside dry ditch of weeds of var. kinds  
incl. withered. Mel juvs. numerous.

Chorthippus, a single ♂, all seen.

Cephus 1 ad. - 1 juv. Taken

Mel ferrugineus 1 ad. taken.

Conocryptus stratus seen chiefly juvs

" fasc. 1 ♂ taken.

Nematus 1 juv. Taken.

$$\text{Orth. } 20 + 6 = 26.$$

$$\text{Other ins } 10 + 4 = 14.$$



1956.3 2 ms SE. of Forestburg, Sanborn  
Co., So. Dakota. VIII. 1, 1956 (R.) Elev. 1250 ft  
on Yankton basis (see above) Sky dull  
sandy roadside spot with some native  
com. All O. seen taken Few adults.

Pseudopomala 1 ♀ taken, all seen, appar. in  
tall grass, prob. Andropogon Aquilegifolius  
one app. on ground. Urophylloides few, 2 taken.

Opeia 2 adults taken. Mel. sp. all juv  
Eritetris 1 sm. juv. taken Arphia 2 juvs.

Taken Appar. 1 juv. Chortophaga

Cnecophorus altans? a few.

$$\text{Orth } 18 + 26 = 44.$$

$$\text{Orth in } 1 + 14 = 15$$

---

1956 4 8.5 ms. W. of Huron, Beadle Co.,  
So. Dakota. VIII. 1, 1956 (R.) Elev.

1300 ft. on Yankton basis (see preceding).

Roadside weeds + grasses little O. <sup>R</sup> Sky dull.  
adult. All species recognized taken.

Urophylloides 1 adult taken.

Mel. f. - rubrum 1 juv. taken.

Cnecophorus altans sp. 1 juv. swept.

$$\text{Orth } 4 + 44 = 48$$

$$\text{Orth in } 3 + 15 = 18$$

---



1956 5 Spottwood, Spink Co., So. Dakota. VIII.1. 1956.  
(C.B.) Elev 1300 on granite knolls - surrounding

A small patch of apparently undisturbed  
prairie cover of varied vegetation, ungrazed.

Every species of *C.* recognized was taken

Memoria mac. mitchellii 2 ♂, 1 ♀, all seen taken

Opis a number. All ad.

Cliphellula a number. all ad.

Aeropedellus a single ♂ taken

Agrostotettix a few.

Aupha typnata 1 ad - all seen.

Trachyrhachis 1 ♂, 1 ♀, all seen, on fr.

Mel. darwini 1 ad. ♂ all seen

" sp. 1 ad. - juv.

Phaenothotus no grass, only.

Conocrypt. multica ads. + juv.

Acraea thun 1 impt.

With 37 + 48 = 85

Other no. 5 + 18 = 23

---



1956.6 Betr. Gutna and Bowdle,  
Edmunds Co., So. Dakota VIII 2, 1956. (R.)

Elev (on Yankton basis) 2300 ft. - prob. quite  
the high.

Overcast with fog + light rain.

In ungrazed and undisturbed Great  
Plains conditions on rolling low hills. Com  
with thistle, white sage + var. grasses.

Very little moving or prodding to stir up

Cephus 1 juv swept.

Phaenocarpa 2 juv. in tall grass.

Mel. ferrug.-rubrum 1 ♂ taken.

Hypochlora alba in white sage only

Cynoph 1 ♀ all taken

Cecanthus 1 ♀ " "

Uth. 9 + 85 = 94

Uth. inv 1 + 23 = 24

---

1956.7 7 mo. S. of Mound City, Campbell Co.,  
So Dakota VIII 2, 1956. (R) Elev

(on Yankton basis) 1900 ft.

Overcast + rain

Great Plains prairie condition, all about.

with some scattered intrusions of alfalfa.

Soil very damp Much tall grass. No white sage.

Cephus very numerous + mod. active.

Chorthippus a number, appar. more limited  
to the tall grass

Phaenocarpa 1 juv swept.

Mel. ferrug.-rubrum Numerous.

" var. spp. juv



1956.7 (cont)

Chelimum sp 1♀ All noticed

Conophalus saltans? Both sexes & juvs.

A number

Conoph. - fasc. ditto

Nemobius 1 juv.

Oecanthus sev. swept.

Orth. 72 + 94 = 166.

Cather was 1 + 24 = 25.

---

1956 8 2 ms. SE of Hull, Emmons Co,  
No. Dakota. VIII. 2, 1956. (R) Elev. (on  
Yankton basis) 2100 ft.

Short grass Plains condition on gently  
rolling surface with patches of taller growth,  
the latter chiefly sunflower. Very little  
white sage. All species recognized were  
taken. Overcast & threatening, <sup>rain</sup> momentarily.  
Cepia numerous, in shorter grass. Few juvs.

Aeropedellus 1♀ swept.

Alphulilla not num. 1 ♂ taken

Phytolista juvs. only.

Hypochlora very few in white sage. 1 ♂ 1 ♀ taken.

Ud. dawsoni Numerous, general. All ads.

Conophalus saltans Abundant Almost  
all ads. general.



Oecanthus A few kept

Orth.  $59 + 166 = 225$

Orth. vis.  $2 + 25 = 27$

---

1956 9 4 ms N of Hinton, Emmons Co.,  
N. Dakota VIII. 2, 1956 (R.) Elev. (on  
Yankton basis) 2150 ft. Overcast, with  
rain all about.

Great Plain herbaceous rolling hills, but  
with more woods - tall grass than usual.

A little white sage. Everything recognizable taken.

Opeia very few, ♂ - ♀ Taken.

Mel. femur-rubrum 1 ♂ taken

" sp. juv. of sp.? species taken.

Photolistes 1 ad. + 3 juvs taken

---

Hypochlora alba. A number in white sage  
Enocph. fix. 1 ♂ taken.

" salturnus? ad. - juv.

Orth.  $29 + 225 = 254$ ,

Orth. vis.  $17 + 27 = 44$ .

---



1956 10 25 mo W. of Mandan, Morton Co,  
No. Dakota VIII. 3. 1956. (R.) Elev (an ex  
Bismarck creek) 1700 ft.

In Missouri - Heart River bottomlands.

Roadside grass with alfalfa tufts.

Chortippus very few seen, 2 taken.

Mel. f. r. - imp. numerous, large no. of  
jims.

Mel. dawsoni 1 ♀ taken, all noticed.

Aeghria pseudonitens 1 taken, all seen.

Phaenocarpa jims. only, few.

Conocrypt. fasc. 1 taken

" latens? A number, many jims.

Mesochorus fasc. type 1 taken.

Calc.  $29 + 254 = 283$

Calc. ins.  $1 + 44 = 45$

---

1956. 11 2 mo. NW. of Sweetbriar, Morton  
Co., No. Dakota VIII. 3. 1956. (R.)

Elev. (an.) 2075 ft.

Great Plains cond. with native vegetation,  
and bare spots with broken stone on  
rolling hills.

Acropodites 1 ♀ swept, all seen.

Mel. all largely jims. Adults taken of  
jims. - robustus - terminal pachardi.



Heathylocten one considerable colony on  
barer spots, with sparse cover, adults &  
juvs. in last stage.

Phaenocarpa juvs. only.

Hypochlor several taken, no other seen.

Agrostotellix a number, in lower cover,  
appar. on fr.

Conocyphus salinae? Mostly juvs. a small  
number of adults taken.

Colth.  $47 + 286 = 333$ .

Other ins.  $1 + 45 = 46$ .

---

1956. 12 9.5 ms. W. of New Salem,  
Morton Co., No. Dakota. VIII. 3. 1956. (R.).  
Elev. (Am.) 2200 ft.

Rolling surface with Great Plains  
vegetation - cone flower, white top, Rudbeckia,  
other plants - grasses. Work done also  
in roadside drain with tall grass & weeds.  
Chorthippus only in drain.

Mermis marul. Single ♀ in taller clumps  
of plains vegt. All seen.

Apia juv. in <sup>thinner cover</sup> dense vegetation, ade & juvs.

Phaenocarpa juvs. only. In taller grass.



1956.12 (cont.).

Melanoplus dawseni local, few or so taken,  
in lower com.

Mel. lividatus 1♀ in tall clump.

" f. - r. gumal.

" sp. jms.

Cremoph. fasc. a few.

" altans none seen.

Orth.  $47 + 333 = 380$ .

Orth. ins.  $1 + 46 = 47$

---

1956.13 6 ms. W. of Glen Ullin, Morton Co.,  
No. Dakota. VIII. 3. 1956. (R). Elev. (am) 2200 ft.

Grassy area in broad flat bottom land  
rolling hills. Com largely a Spartina-like  
grass, some Juniperus & many other weeds.

All species recog. taken exc. 1 hissotina  
carolina.

Orthocentrus num. - very dark in color.

Agria a few.

Mel. packardii a few adults, mostly  
females.

Mel. mex. a few.

" f. - r. num.

Phaenocarpa a few adults of both sexes &  
some jms.

Cremoph. altans num.



$$\text{Orth. } 44 + 380 = 424.$$

$$\text{Other vis. } 1 + 47 = 48$$

1956.14 1 m. N. of South Heart,  
 Stark Co., No. Dakota. VIII. 3. 1956. (R.)  
 Elev. <sup>c.</sup>2500 feet.

Great Plains cover on rolling surface. Some  
 white sage, mostly grass, a few sunflowers.  
 Everything recognized taken. ~~ex. + Met.~~  
bittatum which escaped.

Apria num., chiefly juv.

Acroptus 1 ♂ impt.

Mel. bittatum 1 ♂ taken.

" f. = a few.

" dawsoni 1 pair taken.

Hypochlora 1 juv. impt - all seen.

$$\text{Orth. } 23 + 424 = 447.$$

$$\text{Other vis. } 0 + 48 = 48.$$

1956.15 4 ms. W. of Medora, Billings  
 Co., No. Dakota. VIII. 3. 1956. (R.)

Elev. (an.) 2475 feet.

In "bad lands" canyon. Short grass,  
 little white sage, etc. Little O.

Apria, a few.

Agrotis pseudonivana 1 taken, all seen.

Hypochlora 1 ♀ taken, all seen.

$$\text{Orth. } 6 + 447 = 453.$$

$$\text{Other vis. } 0 + 48 = 48$$



1956. 16 5 mo SW. of Glendive, Dawson  
Co., Montana. VIII. 4, 1956. (R.) Elev. (an.)  
2125 feet.

Great Plains grass condition with taller  
grass and weeds in very shallow  
broadside drain, just up out of the  
Yellowstone flood plain, but not on top of  
the bordering bench. Orthoptera very abundant.  
Melanoplus f. 2. and Agaveotettix swarming.  
All fauna and species carefully recognized  
and taken.

Mermiria local in small numbers in taller  
grass + weeds.

Opus few adults + juvs.

Amphitornus a few in one spot - two taken.

Phlebotoma locally numerous.

Autocara not common, in shorter grass.

Brachymeria scattered, in taller grass + weeds.

Males very active, female much poorer jumpers.

Agaveotettix abundant + several.

Alphina pseudonitens sw. seen, 1 taken

Encyrtolophus 1 taken, all seen.

Trachyrhachis 1 taken, all seen.

Mutilla local, a number seen, three taken

Hippisus a few, 3 ♀ taken, always singly.

Hypocryptus very local.

Phaenocarpa ad. - juvs. a number.



Mel. albana mus. Everywhere and exceedingly abundant.

Mel. parklandi - fordus num. in the better growth.

Mel. other sp. A few only.

Cnecoph. a very few.

Leoth.  $118 + 453 = 571$ .

Leoth. im.  $0 + 48 = 48$ .

---

1956. 17 3. 5 mo. NE. of Fallon.

Prairie Co., Montana. VIII. 4, 1956. (R.)

Elv. (an.) 2275 ft.

Clayey slopes and shoulder at a low sandstone butte on the back from the Yellowstone River. Cover thin grass, very dry. Leoth. few. Everything num. Taken exc. 1 Agrobia pseudonistans.

Phlebotomus 1 Taken.

Copeia very few, 2 Taken.

Cnecoph. triv. 1 Taken

Cnecoph. 1 Taken.

Hippisus 1 ♂ Taken, all seen.

Spharagnum collare 1 Taken, all seen.

Trimerotropis hornei 1 Taken, all seen.



1956. 17 (cont.)

Hesperotettix viridis sev. seen, 1 taken.

Hemelytrus 1 taken on ground, alt. seen.

Mel. packardii a few, 1 taken.

" fun-rubr. sev. taken.

" cinereus ? 1 taken.

Orth.  $18 + 571 = 589$ .

Orth. mis.  $0 + 48 = 48$ .

---

1956. 18 2 ms. E. of Miles City, Custer  
Co., Montana. VII. 4, 1956. (R.)

Elv. (an.) 2260 feet.

Yellowstone River bottom lands. Very  
ditch with tangles and tangle weed  
and adjacent scattered sage. Very dry.

Almost no O. All species neg. taken.

Photolius 1 juv. taken.

Opeus 1 ad. 1 juv. taken.

Mel. f. r. a few, 1 taken.

Celastrus sev. taken from sage.

Orth.  $7 + 588 = 595$ .

Orth. mis.  $1 + 48 = 49$ .

---



1956.19 10 ms. SW. of Miles City,  
Custer Co., Montana. VIII. 4. 1956. (R.)  
Elev. (am.) 2625 feet.

Top of bench S. of Yellowstone River.  
Scattered sage, pines, prickly pear  
and a few yucca. Almost no C.  
exc. Mel. f. r.

1 juv. Aegialia taken. 1 Cercyonides swept from grass.  
Hippodamia in tall apparently true sage. 1.

Orth.  $14 + 595 = 609$ .

Orth. ins.  $0 + 49 = 49$ .

---

1956.20 3 ms. N. of Vananda,  
Rosebud Co., Montana. VIII. 5. 1956. (R.)  
Elev. (am.) 2640 ft.

Bench range condition. Heavily overgrazed  
and very dry. Patch with tall but very  
dry weeds. Anything recogn. taken. Orth. very scarce.  
Agrostis very few.

Urtica ditto - in almost no ground.

Horsetail in virtually bare ~~low~~ baked  
silt.

Mel. f. r. sub. in ditch pond.

Empididae ditto

Orth.  $9 + 609 = 618$ .

Orth. ins.  $0 + 49 = 49$

---



1956.21. 4 ms. SE. of Ingomar, Rosebud Co.,  
Montana. VIII.5. 1956. (R.) Elev. (an.) 2900 ft.

Almost no Q.

Great Plains brush condition. Sparse grass,  
low sage, a few patches of tall grass and weeds  
in some dry ditch.

Agave stolonifera. Mel. f. r. - anthracina.

Uith 4 + 618 = 622.

Uith sin. 0 + 49 = 49.

---

1956.22 1 m. W. of Sumatra, Rosebud Co.,  
Montana. VIII.5. 1956. (R.) Elev. (an.) 3130 ft.

High open brush with low sage and sun-cured  
short grass - very dry. Everything recognized  
taken except 1 leucosterna carolina.  
Very little Q.

Mel. mex. 1 ♂ taken.

.. parkmani 1 ♀ taken.

Conocorypha: 1 taken.

Uith. 3 + 622 = 625.

Uith sin. 0 + 49 = 49

---

1956.23 2 m. NE. of Musselshell,  
Musselshell Co., Montana. VIII.5. 1956. (R.)  
Elev. (an.) 3025 feet.

On rim of brush along N. side of Musselshell  
River Valley. Scattered pine with sun-  
cured grass as ground cover.

Everything recognized taken.



Cordilleria a single ind taken, all seen.

Alpina very few, 1 taken.

Amphitornus sev. taken, all seen.

Andrena not num., 3 taken, scattered.

Agonotettix relatively common.

Philobryna abundant, rather common.

Trachyrhachis on bare spots, a number taken.

Metator a few, 3 taken in separate areas.

Spharagnum angust. a single ♀ taken, all seen.

Met. hermanni 1 taken, all seen.  
putchandi or fridus - a few.

" sp. sp., a few.

$$\text{Orth. } 60 + 625 = 685.$$

$$\text{Orth. no } 0 + 49 = 49.$$

---

1956.24 6 ms. N. of Roundup,  
Musshell Co., Montana. VIII. 5; 1956 (R.)

Elev. (an.) 3640 feet.

On bench N. of Musshell River.

Many exposed ledges of yellowish limestone,  
with <sup>but open</sup> forest of pine. Low grass,  
weeds & associated vegetation.

All species recognized taken except  
H. carolina.



1956. 24 (cont.)

Of Cucotettix saw and heard about six, but most landed high up on steep side wall of cut. Several came on level shoulder and eventually one of these was taken.

Agrotettix a few. 1 Taken.

Gryllus pseudomexicanus 1 one found.

Chortomema haydeni Fairly numerous, usually on bare ground.

Trimerotropis monticola type. 1 ♂, 1 ♀, all seen.

Hesperotettix a few, 1 ♂, 2 ♀ Taken.

Melanoplus pachardi In taller weeds, 3 Taken.

$$\text{Orth. } 18 + 685 = 703.$$

$$\text{Orth. vis. } 0 + 48 = 48.$$

---

1956. 25 11 mi. S S E. of Grassrange, Fergus Co., Montana. VIII. 5, 1956. (R.)

Elev. (an.) 4360 feet.

High open short grass plain with occasional tumble-weed, then weeds and tall grasses roadside.

Everything recognized Taken.

Agrotettix a number, but not abundant.

Aeropedellus a single ♀ taken.

Platybrachis brunnea A small number, not seen. 5 Taken.



Camula a fair no. small ones taken.

Mutata a few, ♂ & ♀ taken.

Andrena mod. numerous. 5 taken.

Tricentropis monticola type. Not numerous. 3 taken.

Mel. truttatus exceedingly abundant, partly in roadside tall weeds - marked diff. in size of ♀♀. Many dead up at the top of tall weeds (fungus?)

Mel. paschendi type. Mod. num.

" tr. quies (infantilis) a few.

" dansonii common and several, ones taken.

" mel. 1 ♂ taken.

Oenanthus a few swept.

Orth. 64 + 303 = 767.

Other no. 0 + 49 = 49.

---

1956. 26 8 ms. WSW. of Lewisville,  
Fergus Co., Montana. VIII, 6, 1956. (R.) -  
Elev. approx. 4000 ft.

Tall wheat grass in unmowed roadside bordering alfalfa and wheat fields.

All sps. of O. recognized were taken.

Pseudopomala, the 2 taken all seen, in tall grass.

Chorthippus abundant.



1956.26 (cont.).

Camnula 1 Taken, all unrecognized.

Phthalictes a few, two adults taken.

Mel. f. r. very abundant.

" mix . . .

" trittatus locally abundant, chiefly adult.

" danovii numerous.

Orth. pladicta All unrecognized and recognizable,  
5, Taken. In fall pass.

Conoph. fasc. 1 capt.

" near saltus ? Abundant. Adults a  
few. Relatively frequent.

Orth. 71 + 767 = 838

Orth. vic. 2 + 49 = 51.

---

1956.27 1.5 mi. E. of Straw, Fergus Co., Montana.  
VIII.6. 1956. (R.) Elev. (an.) 4460 feet.

Roadside fall pass, along side of alfalfa  
field.

Everything unrecognized Taken.

Choraltis 1 seen + taken. In pass near

dead <sup>dry</sup> wood stubs about 20 mm. in

diameter - ovipositing? No other wood near

Chorthippus num. ad. - juvs.

Camnula a small number.

Mel. trittatus a few. fair no.



Mel. f. r. Present in nos.

" mex. " " "

Concept. very few.

Utch 19 + 838 = 857.

Altus in. 2 + 51 = 53.

---

1956. 28 North side slope of Judith  
Gap (1.5 ms. N of Town of same name), Fergus  
Co., Montana. VIII. 6. 1956. (R.) Elev. (an.)  
4940 feet.

Roadside (adjac. to hay fields), with  
tall weeds - grass, some sage, some  
yellow-flowered composites, a few  
Rudbeckia, etc.

Utch. <sup>fairly</sup> abund. <sup>but species limited.</sup> All species scarce. Taken esp.  
1 Neoperotettus (lost).

Acropedellus 1 ♀ swept. All seen.

Mitotus very few, 1 Taken.

Mel. tritatus Common.

" packardii "

" fennix mex. Abund.

" dunsoni Not seen. 2 Taken

" infantilis A few.

Concept. a number.

Ucauthus 1 swept.

Utch. 23 + 857 = 880.

Altus in. 2 + 53 = 55.



1956.29 4 ms. N. of Harlowton, Wheatland  
Co, Montana. VIII. 6 1956. (R.) Elev. (am.)  
4700 ft.

Undisturbed range conditions. Tall  
grass, sunflowers, etc. in spots; short  
grass and ~~exposed~~<sup>bare</sup> patches of ground in  
others.

Everything recognized taken.

Chorthippus appar. scarce - 1 taken.

Amphitornis - a few, 2 taken.

Arphia pseudomontana a number but singly,  
4 taken, all seen.

Agrestotettix a few only.

Metator 1 taken.

Hadrotettix The only one seen.

Trin. monticola 2 taken, all recogn.

" citrina type 1 taken, all recogn.

Trachyrhynchus a few, 4 taken.

Mel. fusca mel. brevis - ads. - juvs.

" pachardi Abundant.

" infantilis Numerous.

" cinerea type? 1 taken.

Phostolites juvs. only.



Archel. gladiata 1♀, all negro

Cynoph. talpae? Numerous.

Length.  $49 + 880 = 929$ .

Other ins.  $0 + 55 = 55$ .

---

1956 30 16 mo. S. of Harlowton,  
Sweet Grass Co., Montana VIII. 6, 1956. (R.)  
Elev. (am.) 5300 ft.

High plains with short grass, rather well  
grazed, prob. by sheep.

Peromyscus swimming, not only Mex.  
all species negro. one taken.

Platyrrhinus by the thousands - all adult.

Amphispiza More num. than I have  
ever recalled seeing it. All adult.

Phiboscus num. some juvs.

Agelaius Common.

Ammodramus A fair no.

Mitrosp. 1 taken.

Trachyrhynchus 1 taken - Lichenne type, but  
no trace pattern for it!

Trinervia latif. type 1 taken

Nesopeltus a small no - no jumping.

Mel. parkardi type abund.

" infantilis? abundant.

" harmoni Common.



1956 30 (cont.)

Mel. another species. A few.

Conocophanes a single one taken.

Anabrus 1 lone ♀ seen & taken. No evidence of any other. Local saying said it was not general, but that an area some few miles away usually had them.

Cuth.  $126 + 929 = 1055$

Cisternus  $0 + 55 = 55$ .

---

1956. 31 9 mi. N. of Big Timber, Sunset Grass Co., Montana. VII. 6. 1956 (R.) Elev. (an.) 4950 ft.

Tall grass roadside with adjacent area of shorter grass and some bare patches. Anything more. Taken esp. 1 Aglyptus

pseudonitens

Chorthippus not common. Juvs as well as adts.

Agrostis a few.

Antenna 1 taken.

Pseudopomala 18 taken. No more could be located. In tallest grass.

Camula abundant.

Mitatus more common than I had ever seen it before. 9 taken. It exhibited the ability to hide very quickly and apparently, if missed, it burrowed down among grass roots.



Enicophthorus numerous. Adults - juvs.  
Not localized.

Neapertettix a few.

Mel. vittatus common.

" parvulus numerous.

" fulvus - rubens "

Conoph. fasc. 1 taken.

" saltans numerous.

Acanthia a few swept.

Uro 67 + 1055 = 1122,

Uro vis. 0 + 55 = 55.

---

1956 32 11 ms. <sup>HN?</sup> S.W. of Big Timber, Sweet  
Grass Co., Montana. VIII. 7, 1956. (R.)  
Elev (am.) 4180 feet.

Roadside - tumble weed (in part dead)  
low yellow-flowered composites, etc. with  
brown spots. Wind very high.

Agrostis a few.

Antecora 1 taken.

Herotoma hayd. a few on bare ground.

Trin. multicolor type 1 taken.

" latifasc. type 1 " on bare ground.

Asperitettix 1 taken.

Mel. vittatus a few, 1 taken.

" parvulus " " 1 taken.

Acanthia 1 swept.



1956. 32 (cont.)

Uroch 14 + 1122 = 1136.  
Uther ins. 5 + 55 = 60.

---

1956. ~~32~~ 33. Shields River Valley 4 ms. N. of  
Yellowstone River, Park Co., Montana VIII. 7. 1956.  
(R.) Elev. (an.) 4500 feet.

Tall rank weeds in dry ditch, bordering areas  
cultivated fields. Little D. - all species seen  
taken.

Chorthippus, a very few, 4 ad. - 1 juv. taken.

Camnula - a few, 2 taken.

Agonotettix 1 taken.

Conoph. fasc 1 pupa.

Uroch. 9 + 1136 = 1145

Uther ins. 1 + 60 = 61

---

1956. 34 2 ms. N. of Wilsall, Park Co., Montana.  
VIII. 7. 1956. (R.) Elev. (an.) 5100 feet.

Open range country - sage, yellow-flowered  
Composites, purple flowered thistle, etc.

No D. noticed except Mel. birtt. & M. fenn-  
suburn, both collected.

Uroch. 2 + 1145 = 1147.

Uther ins. 0 + 61 = 61

---



1956.35 East side of pass (find name)  
on Big Belt Mountains (about 1 m. E. of  
highest point), 9 ms. W. Calkins, Meagher  
Co., Montana. [chk on little Belt chart for  
VIII. 7. 1956. elev. check]

(R.) Elev. (alt. reading 5300 ft., but prob. for  
low.) 5800

Roadside tangles of tall weeds - grasses  
bordered by grass - open range land.  
No timber except in shallow draws on  
the E. side of the range. The roadside  
conditions were more varied than on the  
range surface.

Orth. scarce. All species recognized  
taken.

Acropodellus scarce, all seen taken,  
3 ♂, 2 ♀.

Camnula a few, one taken.

Mel. bristatus a number, 3 taken.

" atlas bruneri type. 1 ♂,

" dauricus a few.

" infantilis ? a few adults - juv.

Orth. 21 + 1147 = 1168

Orth. vis. 13 + 61 = 74.



1956.36 West side of pass on Big Belt  
Mts (see 1956.35) 20 ms. E. of Townsend,  
Broadwater Co, Montana. VIII. 7. 1956. (R.)  
Elev. (alt.) ~~5150~~ <sup>5600</sup> ft.

Relatively dry mountain meadows with  
tall rank growth, along stream, bordered  
by open but solid forest of pine and aspen.  
All species of *O.* recognized were taken exc.  
1 "clatterer", who could not be secured.

*Chorthippus* a number, both sexes collected.

*Chrysothraupis* alt. A male & all seen - Taken.

Whilgust ranch added no more. Particular  
attention was paid to areas of dead limbs.

*Heliothraupis* cardinalis 1 ad. ♂ on road material,  
also 1 juv. fw. others seen.

*Camnula* flavescens in places.

*Mel.* brillatouris in numbers, both 3 Taken.

" clausoni not common, both sexes Taken.

" brunni 1 ♂ Taken.

Catch. 26 + 1168 = 1194.

Other ins. 1 + 74 = 75.

---

1956.37 West side of same pass as 1956.36  
but lower down, 17<sup>mi</sup> E. of Townsend,

Broadwater Co., Montana. VIII. 7. 1956. (R.)

Elev. approx. 4800 ft.

Mountain meadows but more open and  
more grassy than at 1956.36, with mullen



and yellow-flowered composites.

All <sup>40</sup> recognized were taken.

Chrysoclamis adon. 1 ♂, all which  
could be located, not near wood.

Chorthippus numerous.

Camula abundant.

Mel. vittatus a few.

" femoratus? 1 ♀.

" dunsoni very common.

Alt. 41 + 1194 = 1235,

Alt. ins. 1 + 75 = 76.

---

1956 38 Along Ten Mile Creek, 4 ms.

WSW. of Helena, Lewis and Clark Co.,

Montana. VIII. 8, 1956. (R.) Elev.

(alt.) 4150 feet.

Narrow roadside in narrow gulch. Sage,  
buckle and, tall grass, etc.

Little var. of C. All species recognized.

Chorthippus - a few.

Agrostis - 1 taken

Asperotettix - 1 "

Mel. femoratus - numerous.

" mix. a few.

" vittatus a few.

Alt. 15 + 1235 = 1250

Alt. ins. 0 + 76 = 76



1956 39 East side of Continental Divide  
[name of range? not on topographic] 12 ms.  
W. of Helena, Lewis & Clark Co., Montana.  
VIII. 8. 1956 (R.) Elev (alt.) 5600 feet

In heavy fir forest with rather heavy low  
surface cover, occ. small glade-like sunlight  
spots. All species of *O.* seen taken, most in  
the small sunny spots, much dead wood  
but no Chrysomelids seen. One male of Mel.  
Altitudinum type running himself on a  
rock in the sunlight.

Chorthippus locally numerous, more immature  
than adult. Mel. altitudinum relatively few,  
Trin. rufus 2 males - 4 ♀ taken.  
Surface of cut bordering road on earth and  
stones.

Orth. 25 + 1250 = 1275  
Orth. vis. 1 + 76 = 77

---

1956. 40 Mc Donald Pass, Continental  
Divide, W. of Helena, Lewis - Clark - Powell  
Cos., Montana. VIII. 8. 1956. (R.)  
Elev. (b. m.) 6325 ft.

Open dry type of Hudsonian meadows,  
not up to timber line. Low cover of  
grasses and the usual brilliant



Hudsonian wild flowers, with surface  
with scattered boulders, some of large  
size.

All *C.* species recognized were taken  
except *T. suffusus*, of which a very few  
were seen.

Chorthippus - in fair nos.

Camnula - a few.

Mel. sp. - a few.

" brunni few, ♂ + ♀ taken.

Orth. 17 + 1275 = 1292.

Other nos. 2 + 77 = 79.

---

1956.41 2 ms. E. of Garrison,  
Powell Co., Montana. VIII. 8, 1956. (R.)  
Elev. (alt.) 4600 feet.

Roadside-narrow strip of grass and  
tall weeds in ditch and surface of an  
adjoining rock cut.

All *C.* species recogn. were taken.

Aeropedellus 1 ♀ mpt.

Amphitornus 1 in ditch, alt seen.

Blissöetaria var. a few, 1 taken, roadside

Trin suffusus on cut surface.

Cicad. calula a few on cut surf. 1 taken.

Mel lividatus in ditch - 1 taken

Orth. 6 + 1292 = 1298.

Other nos. 0 + 79 = 79.



1956. 42 Along Clark Fork [of Columbia  
River], 5 ms. WNW of Garrison, Powell  
Co, Montana. VIII. 8. 1956. (R.).

Elev (chart - alt.) 4350 feet.

In old field with many dead mullen  
stalks and heavy tangled cover of numerous  
species of weeds.

Anything recognized Taken.

Chorthippus adund. ads. - juv.

Carmula 1 taken.

Mel. bivittatus a few, 1 taken.

" femor-rubrum 17 1/2 taken

" with black bordered abd. apex - two males.  
two females Taken.

Alt. 19 + 1298 = 1317.

Alt. no. 0 + 79 = 79.

---

1956. 43 Bearmouth, Granite Co., Montana.  
VIII. 8. 1956. (R.) Elev. (alt.) 3950 ft.

On flat shoulder - beside road - on north  
bank of Clark Fork opposite Bearmouth  
RR. Station.

In area of natural tall grass, mullens  
- other weeds, with certain patches relatively  
bare.

All species recognized were Taken.

Amphitornis in fair nos. 6 Taken.

Orphina pseudonictana Occas. 2 ads. - 1 juv Taken



Camula a single ♂ taken.

Microsternus can a number - 1 taken.

Trachyphoebe appar. few - 2 taken.

Phaenolichia 1 juv. taken, all unrecognized.

Mel. trinitata In numbers.

" perhardi Numerous.

" funer-nubium Frequent.

Orth. 24 + 1317 = 1341.

Orth. ins. 0 + 79 = 79.

---

1956 44 Along Clark Fork, 3 ms. NW. of  
Clinton, Missoula Co., Montana. VIII. 8, 1956.  
(R.) Elev. (alt.) 3600 ft.

In old field heavily grown up, and abandoned  
road surface.

All sps. of O. ~~to~~ unrecognized taken.

Arphia pseudonectana a few, 1 taken.

Camula 1 taken, all unrecognized.

Microsternus carduus num. on abandoned  
road surface, 2 taken.

Trimerotropis caeruleipes 2 taken, a few  
others seen.

Mel. dawsoni 1 taken, all unrecognized.

" mer. type a few, sev. taken.

" flavipes type ? 1 ♀ taken.

Oecanthus - 1 swept.

Orth. 13 + 1341 = 1354.

Orth. ins. 1 + 79 = 80.



1956.45 2 ms. 8 E. of Florence, Ravalli  
Co., Montana. VIII.9, 1956. (R.) Elev. (alt.)  
3200 feet.

Edge of open pine woods and field of  
out grass and mullen.

Almost no Q. except M. mex.

Agrost. 1 Taken, all noticed, in out grass.

Leath.  $5 + 1354 = 1359$ .

Alther ins.  $0 + 80 = 80$

---

1956.46 Lost Trail Pass, Bitterroot Mts.,  
Ravalli Co., Montana - Lemhi Co., Idaho.  
VIII.9, 1956. Elev. (t.m.) 6951 feet.

Fire-tailed pine and fir forest - definitely  
Hudsonian. No open meadowy areas.

Ground surface chiefly rock fragments.

No Q. at all after considerable effort.

Bunches abundant.

Leath.  $0 + 1359 = 1359$ .

Alther ins.  $3 + 80 = 83$ .

---

1956.47 So. side of Lost Trail Pass,  
Bitterroot Mts., Lemhi Co., Idaho.

VIII.9, 1956. (R.) Elev. (aner.) 5400 feet.

In fir forest and little openings in  
same. Leath. very scarce.



Chorthippus - 1 taken, all seen.

Camnula - the only C. at all evident,  
general, <sup>but not common.</sup> 4 ad. - 1 juv. taken.

Trin. suffusus - 1 taken on stony road  
surface, all seen.

Mel. sp. (short-winged) 2 males taken,  
1 ♀ lost. In low growth.

Stenopus # 1 taken near wild strawberries,  
all seen.

Orth.  $10 + 1359 = 1369$ .

Orth.  $6 + 83 = 89$ .

---

1956. 48 Along North Fork of the Salmon  
River, 2 mo. S. of Gibbonsville, Lemhi  
Co., Idaho. VIII. 9. 1956. (R.) Elev. (alt.)

c. 5000 ft.

Concast.

In low cover, often heavily tangled.  
In dense spruce and pine forest.

C. not at all numerous.

Chorthippus - 1 juv. taken. All seen.

Camnula abundant.

# Platybothrus sp. 1 ♀ taken, all seen,  
in tangled cover. A careful search  
netted no more.

Mel. both bivittatus Not common, 3 taken.



1956.48 (cont.)

*Mel. fuscus ruber* 1 ♂ def. taken.

" *mex. type*. Numerous

" black-bordered subg. sp. 1 ♂ taken. No more recognized

*Stirax* 5 seen, 2 taken. Expert litters in the tangled low cane, some of which was wild strawberry.

Alt.  $15 + 1369 = 1384$   
Alt. vis.  $6 + 89 = 95$

---

1956.49 Along Salmon River at mouth of  
Birney Creek, 16.5 mi. S. of Salmon,  
Lemhi Co., Idaho. VIII.10.1956. (R.)  
Elev. (alt.) 4200 ft.

Narrow bunch with a little sand material,  
clawlike sage, *Grayia*?, rabbit-used and  
sun-cured out grass. All *O. unrecognized* taken.  
*O.* not numerous - very local.

*Amphitomon* the one taken all seen.

*Exc. Amphibia*  
*pseudonictus*

*Conozoa* appar. in colonies on the bare spots.

*Mel. mex. type* in nest, no.

" sp.? 1 ♀. distinct, banded legs.

*Cicadanthus* swept from rabbit used.

Alt.  $15 + 1391 = 1406$ .

Alt. vis.  $0 + 95 = 95$

---



1956. 50 Along Salmon River near mouth  
of Allham Creek, Lemhi Co., Idaho. VIII. 10. 1956.  
(R.) Elev. (alt.) 4700 ft.

Silt, ~~and~~ small boulders and many  
small stones, with sage and rabbit weed.  
All species of *O. unrecognized* were taken.  
*Trim. bilobata* locally numerous, but very  
active. Acc. flies into sage.

*Mel. sp.?* 1 ♂ taken!

Arth. 12 + 1406 = 1418.

Arth. inv. 0 + 95 = 95.

---

1956. 51 Along Salmon River 1/2 m. NE. of  
mouth of Morgan Creek, Custer Co., ~~Mont~~ Idaho.  
VIII. 10, 1956. (R.) Elev. (alt.) 4900 ft.

In sage, *Sarcobatus*, rabbit weed and  
shad scale. All species of *O. unrecognized*  
were taken.

*Trim. gracilis* - the one taken all seen.

" *bilobata* - numerous but very active.

*Mel. packardii* type. Female taken all  
*unrecognized*.

*Chrysanthus* - imp.

Arth. 9 + 1418 = 1427.

Arth. inv. 0 + 95 = 95.

---



1956. 52 15 ms. S, S, E. of Challis, Custer Co.,  
Idaho. VIII. 10. 1956. (R.) Elev. (alt.) 5950 ft.

On gravelly and stony silt with sage, rabbit weed,  
Grain? (spring) etc., but very little grass.

All species of *C. unrecognized* are taken.

Herotumma not numerous, local. <sup>11</sup>

Trim. pallidip. A number seen, chiefly roadside,  
one taken.

T. gracilis - 1 taken, all seen.

Aerochoreutes - 2 seen, 1 taken.

Orth. 6 + 1427 = 1433,

Ather vis. 0 + 95 = 95.

---

1956. 53 11 ms. SE. of Chilly, Custer Co.,  
Idaho. VIII. 10. 1956. (R.) Elev. (alt.) 6550<sup>6550</sup> feet.

Low sage and low shrub-scale, with areas of  
bare stone. All species of *C. taken* *recogn-*  
*ized* are taken.

Herotumma moderately numerous, but almost  
no females seen. Very elusive - hard to see.

Trim. gracilis. Few - 2 taken.

Aerochoreutes but 1 seen, and taken, on  
broken gray blue stone exactly the same  
color as the insect.

Orth. 7 + 1433 = 1440.

Ather vis. 0 + 95 = 95.

---



1956.54 8.5 ms. SW. of Arco, Butte Co., Idaho. VIII. 11, 1956. (R.) Elev. (alt.) 5400 ft.

Rabbit used with very little sage, some low brush grass on strong soil.

No C. taken.

Blister lutes all in rabbit used.

$$\text{Crotch. } 0 + 1440 = 1440.$$

$$\text{Uther vis. } 6 + 95 = \frac{101}{41}.$$

---

1956.55 7 ms. SW. of Carey (1 ms. NE. of Tikhona), Blaine Co., Idaho. VIII. 11, 1956. (R.) Elev. (alt.) 4925 feet.

In sage and rabbit used.

No C. taken.

$$\text{Crotch. } 0 + 1440 = 1440.$$

$$\text{Uther vis. } 6 + 101 = 107.$$

---

1956.56 2 ms. SW. of Redfield, Lincoln Co., Idaho. VIII. 11, 1956 (R.) Elev. (alt.) 4560 ft.

Sun-cured oat grass - few rabbit-used.

Cougar few.

Almost nothing.

Mel. mus. type a few.

$$\text{Crotch. } 4 + 1440 = 1444.$$

$$\text{Uther vis. } 0 + 107 = 107.$$

---



1956. 57 2 ms. S. of Shoshone, Lincoln Co.,  
Idaho. VIII. 11, 1956. (R.) Elev. (alt.) 4400 ft.

Rather tall sun-cured oat grass with some  
sprigs of silt or corn fragments.

All D. <sup>sp.</sup> ringneigra were taken.

Antlocara not numerous, scattered, 4 taken.

Trachyrhachis 1 taken, all seen.

Coryza abundant and exceedingly active.

Mel. mex. type, abundant - free flying.

Cedalonotus enigma in fair no. very  
active for a non-flying species. local.

Stenopyga sp. 1 ♀ <sup>full of eggs</sup> kept. No other seen.

$$\text{Lith. } 33 + 1444 = 1477.$$

$$\text{Other vis. } 0 + 107 = 107.$$

---

1956. 58 2 ms. NW. of Shoshone Falls,  
Jerome Co., Idaho. VIII. 11, 1956. (R.)  
Elev. (alt.) 4100 feet.

Old field of sun-cured tall oat grass,  
timothy and other weeds.

All D. ringneigra. Taken.

Antlocara 1 taken, all seen.

Cedalonotus enigma. Few, 1 taken.

Mel. mex. - type common.

$$\text{Lith. } 4 + 1477 = 1481.$$

$$\text{Other vis. } 0 + 107 = 107.$$



1956. 59 4 ms. S. of Berger, Twin Falls Co.,  
Idaho. VIII. 12. 1956. (R.) Elev. ?

Sage and sun-cured oat-grass, with some  
fiddle-wood (largely dead) on this soil  
on lam.

Very little Q.

Cougar roadside, 1 taken.

Agave - Trin. gracilis seen but lost.

Cuth.  $1 + 1481 = 1482$ .

Other vis.  $0 + 107 = 107$ .

---

1956. 60 3.5 ms. SW of Rogerson, Twin Falls  
Co., Idaho. VIII. 12. 1956. (R.) Elev. (alt.) 4700 ft

+ rabbit <sup>and</sup>  
sage country. Almost no Q.

Cougar seen but lost.

Mel. mex. type - no. seen, 1 taken.

Cuth.  $1 + 1482 = 1483$ .

Other vis.  $0 + 107 = 107$ .

---

1956. 61 15 ms. SW of Rogerson, Twin Falls  
Co., Idaho. VIII. 12. 1956. (R.) Elev. (alt.)

5200 ft.

In sage and sun-cured grass with open  
areas between these often paved with broken  
stone and pebbles.

Q. not at all in evidence.

Trin. gracilis seen - lost.



1956.61 (cont.)

The single Aeroboreutes taken was all seen.

It was on the shingle and matched rock fragments exactly in color.

Colth. 1 + 1483 = 1484.

Other vis. 0 + 107 = 107

---

1956.62 4 ms. due N. of San Jacinto, Elko Co., Nevada. VIII. 12. 1956. (R.) Elev. (alt.) 4800 ft. Apparently Fraxia? (spring) and rabbit used on tilt with some areas alkali incrustated.

All species of O. unrecognized were secured. Individuals were very few.

Camnula The one taken was all seen.

Trin. pallidip. a few.

Cicob. undulatus H. H. H. = Taken.

Colth. 5 + 1484 = 1489.

Other vis. 0 + 107 = 107

---

1956.63 Near Salmon Falls Creek, 1.5 ms. S. of Contact, Elko Co., Nevada. VIII. 12, 1956. (R.) Elev. (alt.) 10000 ft.

Hilly divide of weathered granite boulders, the fine gravel from the decomposition of which covers the surface, bare in large areas, with sage and rabbit used in others.

All species of O. unrecognized were taken.

Cordilacris a single specimen taken on gravel.



Trim. pallidip. A few - 2 taken.

" trilineata 1 taken, all seen.

" Contrastingly colored - almost  
always on the granite gravel.

Not exceptionally active.

Mel. ruf. sp. a few - 2 taken.

Crith.  $11 + 1489 = 1500$ .

Crith. vis.  $0 + 107 = 107$ .

---

1956.64 16 mi. S. of Contact, Elko Co.,  
Nevada. VIII. 12. 1956. (R.) Elev. (alt.)  
5325 ft.

Entirely sage on gently rolling slopes  
with numerous gravelly or stony bare  
spots.

All species C. ruf. taken.

Chrysomela local - not numerous.

Trim. trilineata scarce.

" Other sp. 1 taken, all seen.

Crith.  $8 + 1500 = 1508$ .

Crith. vis.  $0 + 107 = 107$

---

1956.65 Summit of divide 6 mi. S. of  
US. 93 crossing of Thousand Spring Creek, Elko  
Co., Nev. VIII. 12. 1956. (R.) Elev. (alt.) 6250 ft.

Table low sage, much dead wood, rabbit used - tall  
erect grass. Almost no C. Trim. gracilis taken

Crith.  $1 + 1508 = 1509$ .

Crith. vis.  $1 + 107 = 108$ .



1956.66 4.2 ms. S. of Wells, Elko Co.,  
Nevada. VIII. 13. 1956. (R.) Elev (alt.) 5600 ft.

Sage and rabbit weed on silt, latter in greater  
part with pavement of small broken stones.

All species of *O. recognized* taken.

*Trim. gravis*, as usual, about sage.

" reddish species with three tibiae matches  
in its red tone the shingle on which it  
occurs.

Orth.  $4 + 1508 = 1512$ .

Orth. vis.  $0 + 107 = 107$ .

---

1956.67 Eastern border of Goose Lake  
Lake, 3.5 ms. S. of junction of U.S. 93 - alt.  
U.S. 50, White Pine Co., Nevada. VIII. 13. 1956.  
(R.) Elev. (with alt. + an.) 5750 feet.

On the dry adobe 1 *Aeroboreus*.

On stony border 1 ditto - 1 *Trim.* <sup>pale</sup> reddish  
with blue <sup>green</sup> tibiae.

All this *O. seen*.

Orth.  $3 + 1512 = 1515$ .

Orth. vis.  $0 + 107 = 107$ .

---

1956.68 10 ms. S.E. of Cherry Creek, White  
Pine Co., Nevada. VIII. 13. 1956. (R.)

Elev. (altim. + an.) 5825 feet.

Corn almost entirely in sage with  
bare areas between.



Single Trim. Taken was the only  
orth. seen.

Orth.  $1 + 1515 = 1516$ .

Orth. vis.  $0 + 107 = 107$ .

---

1956.69 7 ms. N. of McGill,  
White Pine Co., Nevada. VIII, 13, 1956 (R.)

Elev (mean of instruments) 6000 ft.

Corn very low and some rabbit weed  
on silt with wash ribbons of gravel.

All species of *O. recogn.* were collected.

Aerochoreutes the one taken was all seen.

Trim. pallidip. Several, one taken.

" sp. with greenish-blue tibiae.

One taken all seen.

Orth.  $3 + 1516 = 1519$ .

Orth. vis.  $0 + 107 = 107$ .

---

1956.70 4.5 ms. SW. of Junction of  
U.S. 6 & Nev. 38 (in White River Valley),  
White Pine Co., Nevada. VIII. 14, 1956.

Elev. (alt.) 5850 ft.

Shallow valley with corn fragaria?,  
sage & some rabbit weed.

All species of *O. recognized* were taken.

Trim. bicolorata a number seen, but all were  
very elusive. 1 taken.

Trim. banded with greenish tibiae. The two







1956.73 East side of road crossing  
of Hot Creek Mountains, Nye Co., Nevada.  
VIII. 14, 1956. (R.) Elev. (ann.) 5675 ft

Low sage, shad-scale and rabbit weed.  
Only O. seen was Trim. struma, of  
which a small series was taken. The  
species sometimes flies into low sage.

It is not particularly elusive, nothing  
as much so as T. pallidipennis.

$$\text{Ckth. } 7 + 1531 = 1538.$$

$$\text{Ckth. ins. } 0 + 107 = 107.$$

---

1956.74 13.5 mo. W. of Coldale Junction,  
Esmeralda Co., Nevada. VIII. 15, 1956. (R.)  
Elev. (ann.) 5400 ft.

Low shad-scale, Tropah & other plants  
over on stone and gravel rimpled silt in  
broad canyon leading up westward to the  
little settlement of Basalt.

Only O. seen Trep. & Trim. bilobata.  
Trepidulus 2 taken, all seen.

T. bilobata lost but clearly identified.

$$\text{Ckth. } 2 + 1538 = 1540$$

$$\text{Ckth. ins. } 0 + 107 = 107$$

---



1956.75 Montgomery Pass, Mineral Co.,  
Nevada. VIII, 15, 1956. (R.) Elev. (b.m.) 7166 ft.

Juniper, piñon and some mountain mahogany  
on lava with sage - rabbit used.

1 Melanoplus Taken.

Host a blue-winged Trinicrotopis.

Orth.  $1 + 1040 = 1041$ .

Other vis.  $6 + 107 = 113$ .

---

1956.76 3.8 ms. NW. of Benton (the Town),  
Mono Co., California. VIII, 15, 1956. (R.).  
Elev. (an.) 6825 feet.

Tall rabbit used and some sage on silt and  
on strong hillside under bluffs of heavily  
eroded sedimentary rock.

All species of C. seen taken.

Trin. bitubata few on silt, 1 Taken.

" blue tubis. 1 Taken all seen, on silt.

" strenua tw. seen, 1 Taken, all on silt.

Mel. quies, seeking refuge in rabbit used when  
pursued. 2 Taken. But few seen.

Orth.  $6 + 1041 = 1047$

Other vis.  $0 + 113 = 113$

---



1956.77 17 mo. E. of Leavine, Mono Co.,  
Cal. VIII. 15. 1956. (R.) Elev. (an.) 8500 ft.

Open high country with timber on some of  
the Mono craters to the south or. miles.

Sage and some rabbit weed on finely  
broken pumice. Wind strong.

All species of *O.* seen were taken.

The only Uedalonotus taken was in  
rabbit weed.

Green-legged Trim. Not numerous on  
the pumice surface.

Cordillaria 1 juv. taken, 1 ad. lost,  
both on pumice.

Orth. 5 + 1547 = 1552.

Orth. ins. 0 + 113 = 113.

---

1956.78 2.5 mo S & E of Leavine, Mono  
Co., Cal. VIII. 16 1956 (R.) Elev. (chart)  
7000 feet

Meadow at foot of Williams Butte.  
Boggy in spots, with yellow composites -  
tall grass.

See juv. Melanophyes all seen in <sup>within</sup> meadow.  
Corchorus <sup>locally</sup> numerous, roadside and in  
drier areas in the meadow.



1956. 78 (cont.)

Orth.  $25 + 1552 = 1577$

Other ins  $3 + 113 = 116$ .

---

1956 79 So. end of Pumice Valley, 7.5 ms SSE  
of Leeving, Mono Co., Cal VIII. 16. 1956 (R)  
Elev (aner. - ch.) 7500 feet.

Small flat enclosed by low hills (largely of  
lava), surface volcanic ash, cover sage,  
rabbit weed and mountain mahogany.

Eumastoid beaten from mountain mahogany -  
no more seen even after long beating and  
searching.

Trim with blue legs numerous on volcanic  
till, but occ. flying into shrubbery.

Trim. gracilis few seen, 1 taken, on till.

Mel. sp. in sage, very active, few seen,  
1 taken.

Orth.  $12 + 1577 = 1589$ .

Other ins.  $13 + 116 = 129$ .

---

1956. 80 Near Headman Summit (US. 395),  
2.5 ms. S. of Leeving, Mono Co., Cal.

VIII. 16 1956 (R.) Elev (b.m.) 8000 ft.

Only 1 seen Trim., apparently T. gracilis,  
but lost.

Orth.  $0 + 1589 = 1589$ .

Other ins.  $7 + 129 = 136$ .

---



1956.81 2 mi S of Headman Summit,  
Mono Co, Cal. VIII. 16. 1956 (R.)

Elev (aner.) 7900 ft.

In open bull pine forest on volcanic  
silt, with ground cover in places of dead  
pine needles and cones.

Xanth montanus type hole 0 seen.

Two pairs, all noticed, none taken.

Orth.  $4 + 1589 = 1593$ .

Other vis.  $0 + 136 = 136$ .

---

1956.82 South side of Sherwin Hill,  
to N of Round Valley, Mono Co, Cal.  
VIII. 16. 1956 (R.) Elev. (b.m.) 6000 ft.

Slope largely of stony slabs, some of  
large size, and stony gravel cone size,  
rather wet and mountain mahogany.

All species of O clearly recognized were  
taken. Not difficult on account of terrain  
and difficult footing.

Cremastoid single pair swept from  
mountain mahogany - all seen.

Amphitornus two seen, 1 taken. Exceedingly  
active, apparently seeking shelter in  
logs.



1956.82 (cont)

Trin.: blue wing. Several seen, 1 taken. Very active, ~~was~~ apparently near the large rocks. Lepus the single 1 taken was all seen. The strong gravel.


Mel. sp. Apparent in sage very active and most difficult to track down 1 taken.

With  $5 + 1593 = 1598$ .

With ins  $28 + 136 = 138$ .

---

1956.83 3ms. N. of Laws, Inyo Co., California.  
VIII. 17. 1956. (R.) Elev. (ch) 4150 ft

Salt grass - branching type  + tall rabbit-  
weed on saline impregnated ground.  
All species of D recognized taken. Individuals  
very few.

Mel dorsator - all seen were taken, flying freely.  
Cyphodactylus a few seen - two taken,  
very active.

With  $5 + 1598 = 1603$

With ins  $0 + 138 = 138$

---

1956.84 4.5 ms N. of Chalfant,  
Mono Co., California. VIII. 17. 1956 (R)  
Elev. (an.) 4700 ft.

Dense shrubbery of numerous species - a little  
sage, something resembling Koeberlinia,



a little tumble-weed (latter roadside).  
Numerous stones and shallow washes  
filled with stony silt and gravel.

All species of *O* recognized were  
taken.

*Trim. pallidus*. A few, one taken.

" sp. n. sps.? If all one thing, note  
the enormous variation in fore coloration,  
and if but one, certainly immediate environ-  
ment has had a play. The washes at  
this place showed much variation in  
the tone of the stones thickly strewn  
over them. Species local in small  
groups, not particularly wary, but  
the colorations are most protective.

$$\text{Orth } 9 + 1603 = 1612.$$

$$\text{Orth. } 0 + 138 = 138.$$

---

1956. 85 6 ms N of Benton Station,  
Mono Co., California ( $\frac{1}{2}$  ms. S of Nevada  
state line) VII. 17, 1956 (R.) Elev (6 m)  
6000 ft.

Sage and *Ephedra* on long outwash slopes  
from Mt Montgomery in the White Mts.  
(Inyo chain) to the east. Soil gravel and  
silt.



1956.85 (cont)

g But <sup>two</sup> ~~one~~ species of *O. seen* -

Trim tritubata - The single one taken was the only one noticed

Trim grum-fibris. Not numerous

Uth.  $5 + 1612 = 1617$ .

Uth. ins.  $0 + 138 = 138$

---

1956.86. North side of Montgomery Pass,  $\frac{1}{2}$  m. from summit, Mineral Co., Nevada VIII.17.1956. (R). Elev (ann - ch) 2100 ft

Lava stream slopes with open stands of juniper and piñon. Low cover sage, Ephedra and rabbit weed.

Only species of *O. seen* was the blue-winged Circotettix, which was local, but not numerous, preferably on the bare rough lava. Hard to secure as wind was strong through the pass.

Uth.  $3 + 1617 = 1620$ .

Uth. ins.  $1 + 138 = 139$

---

1956.87 6 mi E of Basalt, Esmeralda Co., Nevada VIII.17.1956. (R) Elev. (ann.) 5175 ft.

Gentle slopes of low fan of silt thickly covered with lava fragments and with shingle of same and other rocks. Mt. Miller immediately to the north.



Sole species of *O. sum* was the Trim.  
taken. Two *sum*, one captured.

Orth.  $1 + 1620 = 1621$ .

Orth. *vis*  $0 + 139 = 139$ .

---

1956.88 Ramsey Well, 13 ms. S. of  
Tonopah, Esmeralda Co., Nevada. VIII. 18, 1956.  
(R.) Elev (ch) 4994 feet.

Silt flat covered with pavement of small  
stones and gravel. Low Chad-scale and  
Grayia?

Two Hymenotettix *sum*, 1 taken. One on  
ground, lost in Grayia, the other one  
beaten from latter.

Orth.  $1 + 1621 = 1622$ .

Orth. *Orth. vis*  $0 + 139 = 139$

---

1956.89 3 ms N of Goldfield (at junction  
of Alkali Springs road), Esmeralda Co.,  
Nevada. VIII. 18, 1956. Elev (ch) 5420 ft.

On mosaic-like closely placed pavement  
of small stones on silt. Plant cover open  
stand of low sage, Grayia and a very  
few Ephedra. [First tree yuccas here!]

Sole *O. sum*, the wonderfully protected  
Trim taken.

Orth.  $1 + 1622 = 1623$ .

Orth. *vis*  $0 + 139 = 139$ .



1956.90 3 ms. S of Goldfield, Esmeralda  
Co., Nevada VIII. 18, 1956 (R) Elev (ch. c  
ann) 5700 feet.

Salt with heavy shrub but not quite mosaic proper.  
Some dead trees, numerous Joshua trees (exten-  
sive number examined without results)

At 0 sun, the two species taken.

Trim strepera. Very few noticed, 2 taken


" quinn-khaie. All taken, all seen

Arith  $3 + 1623 = 1626$

Other ins  $0 + 139 = 139$

---

1956.91. Springdale, Nye Co, Nevada  
VIII. 18, 1956. (R) Elev. (ch.) 3900 ft.

Salt grass  and tall grass in meadow of  
saline encrusted ground.

✓ Paropromala numerous in grass, very active,  
usually taken singly.

Melanophus 7 ♀ all seen, in grass.

Two melanoploid swept in grass.

---

Arith  $45 + 1626 = 1671$ .

Other ins  $3 + 139 = 142$ .

---

1956.92 Death Valley between Well Gate &  
Salt Well, Inyo Co, California VIII 19. 1956.  
(R) Elevation (to m) 2000 ft.

Typical sparse plant cover of Death  
Valley detrital slopes. Corviller,



Atriplex hymenelytra and some scattered cacti (cholla type).

Brontitix locally numerous in Covillea ads. - juvs.

Tamocerus 4 juvs swept from Covillea.

1 Hignotitix swept from Covillea, was in net but lost!

Orth 21 + 1641 = 1662.

Other ins. 1 + 142 = 143.

---

1956. 93 <sup>Not stop</sup> Boundary Canyon, Amargosa Range, Inyo Co., Cal [a short distance above Hole-in-the-Rock Spring] VIII. 19, 1956. (R.)  
Elev (b. m.) 3000 ft.

Covillea, Atriplex hymenelytra + usually across vegetation, dry and brittle, on stony surface of rough ramifying wash.

Brontitix local in Covillea, ads. - juvs.

Hignotitix 1 swept from Covillea.

~~Tam~~ Insana covilliae 1 juv ditto.

Orth 9 + 1662 = 1671.

Other ins. 5 + 143 = 148.

---



1956.94 Daylight Spring, Amargosa Range,  
Inyo Co, Cal VIII. 19, 1956 (R.). Elev. (b.m.)  
4317 feet

In general Covillea area, but immediately at  
spring several low trees and an area of tall  
weeds and grasses about the tiny runoff

Boottettia in Covillea.

Parabacillus swept from tall weeds on  
runoff

Trim pallidip. on stony surface.

Orth 6 + 1671 = 1677.

Orth in 3 + 148 = 151.

---

1956 95 Amargosa Desert 5 ms. WSW. of  
Beatty, Inyo Co, Nevada VIII. 19, 1956. (R.)  
Elev. (ch) 3200 feet

Typical Amargosa conditions dominated by  
Covillea.

Everything taken swept from Covillea -  
nothing seen in other plants or on ground  
surface. No Orth. species lost.

Boottettia numerous, all taken adults

Ligurotettia 2 taken, all seen.

Encarsia covilleae four adults taken, none  
lost - note all 3 ♂♂ are juvenes, the single ♀  
brown

Orth. 13 + 1677 = 1690.

Orth in 2 + 151 = 153.



Amargosa Desert,  
1956.96 1 m S. of Carrara, Nye Co., Nevada.  
VIII 20, 1956. (R.). Elev. (ch.-an.) 3000 ft.

Nothing seen or taken except from Covillea.  
Boottittia locally numerous.

1 Lucania covilloae taken beaten from  
Covillea.

$$\text{Arth. } 23 + 1690 = 1713.$$

$$\text{Arth. ins. } 1 + 153 = 154.$$

---

1956.97 5 ms. E & E. of Rathrop's Well,  
Amargosa Desert, Nye Co., Nevada  
VIII. 20, 1956. (R.). Elev. (ch.-an.) 2875 ft.

Solely Boottittia in Covillea. Most of  
Covillea stunted, dried up and brownish.

Note amount of brown tone in Boottittia.

$$\text{Arth. } 8 + 1713 = 1721.$$

$$\text{Arth. ins. } 2 + 154 = 156.$$

---

1956.98 3 ms. E of Point of Rocks,  
Nye Co., Nevada. VIII. 20, 1956. (R.)  
Elev. (an.) 3550 ft.

Nothing except Boottittia in Covillea.  
Examined a number of true yuccas  
without results.

$$\text{Arth. } 18 + 1721 = 1739.$$

$$\text{Arth. ins. } 0 + 156 = 156.$$



1956.99 11 mo SE. of Indian Springs, Clark  
Co., Nevada. VIII 20. 1956. (R.) Elev. (ann.)  
8350 ft.

Nothing except Boottellia, and the latter in  
Covillea. Wind a steady gale, making it  
almost impossible to handle a net.

Orth. 3 + 1739 = 1742.

Orth. vis. 0 + 156 = 156,

---

1956.100 15 mo. NW. of Las Vegas [at junction  
of Kyle Canyon road with U.S. 95], Clark Co., Nevada.  
(NW. 34)  
VIII. 20, 1956 (R.) Elev. (ann.) 2775 feet.

Nothing but 1 Boottellia in Covillea. Nothing  
else on ground surface.

Orth. 1 + 1742 = 1743.

Orth. vis. 0 + 156 = 156.

---

1956.101 <sup>Morgan Mesa</sup> 5 mo. NE of Glendale, Clark Co.,  
Nevada VIII 21, 1956 (R) Elev. (mistaken)  
1900 ft.

Loose silt on mesa with open stand of Covillea  
and a low leafless grayish bush.

Nothing but 1 Boottellia swept from Covillea.

Orth. 1 + 1743 = 1744

Orth. vis. 0 + 156 = 156

---



1956.102 Pink Sandhills, 2.5 ms SE of  
Mt Carmel Junction, Kane Co., Utah. VIII. 22, 1956  
(R.) Elev. (aner.) 6400 ft.

Juniper & piñon with <sup>sphagnum</sup> sedge on soft deep  
pinkish sand.

All O. seen the one specimen of Trimastix  
seen. Taken on bare sand.

$$\text{Orth. } 1 + 1744 = 1745.$$

$$\text{Orth. no. } 0 + 156 = 156.$$

---

1956.103 5.5 ms. ESE of Fredonia,  
Coconino Co., Arizona. VIII. 22, 1956.

(R.) Elev. (aner.) 5775 ft

Patches of tall bunch grass, curly grass, Fremont  
weed & sedge on reddish sandy silt.

Little O, all seen taken.

Parabacillus swept from tall grass.

Opeia about the same com, and swept  
from it.

Ageneotettix on bare fr, one taken all  
seen.

$$\text{Orth. } 5 + 1745 = 1750.$$

$$\text{Orth. no. } 12 + 156 = 168.$$

---



1956. 104 No. slope of Kaibab Plateau, 17 ms.  
SE. of Fredonia, Coconino Co., Arizona

VIII. 22, 1956 (R.) Elev (am) 6700 feet.

Very short curly grass on strong slope under open  
stand of juniper, piñon and mountain  
mahogany.

Cordillaria in the <sup>small</sup> intervals between the clumps  
of short curly grass, no. lost in addition to those taken  
Parabacillus rupt.

Juv. aridid all rupt.

$$\text{Cith. } 5 + 1750 = 1755,$$

$$\text{Cith. vis } 0 + 168 = 168.$$

---

1956. 105 12.5 ms S of Jacob Lake,  
Kaibab Plateau, Coconino Co., Ariz.

VIII. 23, 1956. (R.) Elev. (mos. am) 8475 feet.

In small glade in fir and aspen forest,  
usually on broken stone, with light low  
plant cover

No O. except Circot coconino, which  
was in fair numbers, and not they for  
the genus

$$\text{Cith. } 6 + 1755 = 1761.$$

$$\text{Cith. vis. } 1 + 168 = 169.$$

---



1956. 106 So end of Pleasant Valley,  
Kaibab Plateau, Coconino Co., Ariz. VIII. 23. 1956.  
(R.) Elev. (am. of instrument) 8300 ft.

Mtn. meadow of very short grass + low  
meadow vegetation, surrounded by fir and  
aspen.

Only *O. v.* was Trim. pistularia group  
locally num. on low rocky knoll in  
meadow. But moderately active.

$$\text{Urbh. } 10 + 1761 = 1771.$$

$$\text{Other no. } 0 + 169 = 169.$$

---

1956. 107 V. T. Park, Kaibab Plateau,  
28 ms. S. of Jacob Lake, Coconino Co.,  
Ariz. VIII. 23, 1956 (R) Elev. 8400 ft.

Broad grassy mtn. meadow on  
stony soil. No *O.* except 1 Circ.  
coconino lost!!

$$\text{Urbh. } 0 + 1771 = 1771.$$

$$\text{Other no. } 2 + 169 = 171.$$

---



1956. 108 T. V Park, Kaibab Plateau,  
1 m. N. of No. Entrance to Grand Canyon  
Nat. Park, Coconino Co., Ariz. VIII. 23, 1956.  
(R.) Elev 8800 feet.

[This is the general area where I took Bradypterus  
in 1947, but none in evidence this time.]

See previous no. (1956 107) for conditions.

No O. except 1 Mel. bruneri &  
juv. odipodids.

Urb. 4 + 1771 = 1775.

Urb. inc 7 + 171 = 178.

---

1956 109 East escarpment of Kaibab Plateau.  
5.5 ms. E of Jacob Lake, Coconino Co.,  
Ariz VIII. 24, 1956 (R) Elev (am. of  
instrument) 6300 feet.

Near lower edge of bull pine zone, sur-  
face stony, lower com chiefly oaks.

Sole O. were the species taken.

Trin blue-winged, 3 seen, 2 taken.

Mel. bruneri type. 2 seen, 1 taken

Juv odipodids none.

Urb 6 + 1775 = 1781

Urb. inc. 4 + 178 = 182.

---



1956. 110 Vicinity of Elden Ranger Station  
4.5 ms E. of Flagstaff, Coconino Co.,  
Ariz (R.) VIII. 25, 1956 Elev (an. & ch.)  
6900 feet.

Tall grass, Fumille weed and Rudbeckia  
(latter in fr quantity in bloom), and areas  
of very short grass.

All species of O. unrecognized were taken.  
Amphitornus - Agonotettix were particularly  
in the short grass.

Many Melan. juvs. about.

Parabacillus, a single one swept from grass.

Cordillarius local - not num. Very active.

Amphitornus numerous, as above.

Agonotettix <sup>ph. W.</sup> not num, as above.

Phlebotoma local.

Ayria pandemonium no. seen, 1 taken.

Melanoplus 2 species adult, both taken.

" juv. abundant.

Cicanthus 1 swept

Orth.  $55 + 1781 = 1836$

Orth. mis.  $8 + 182 = 190$

---



1956. 111 About 1 m. NE. of E. foot of  
Elden Mtn., 6 ms. NE of Flagstaff,  
Coconino Co., Arizona VIII. 25, 1956. (R.)  
Elev. (ch. - instruments.) 6925 feet

Tall grass, Rudbeckia, rabbit weed, etc.,  
under open pine. Many <sup>small</sup> areas of  
exposed or partly exposed reddish gravel.  
Amphitomus <sup>All species of A. group were taken</sup> not common

Agrenotellus th. w. in fair nos. - very active, more  
Arphia pseudonictans <sup>in lower spots.</sup> 2 seen, both taken.

Neopentatella sp. ♂ 1 swept.

Mel. sp. juv. common.

" sp. very small - aedeus like. 1 ♂, 1 ♀  
taken

" sp. medium. 1 ♂ taken

" large 1 ♂ taken

Cecanthus - 1 swept

Metabryana plattii type. Local & only  
in lower spots. Not at all shy.

Orth. 28 + 1836 = 1864.

Orth. vis 0 + 190 = 190



1956. 112 Fort Valley, SW. of  
San Francisco Peaks, Coconino Co.,  
Ariz. VIII. 25, 1956. (R.) Elev. (an. +  
ch.) 7400 feet.

In open spots of pine forest (tall pine  
+ another species with blackish bark,  
none of latter) on ground littered with  
dead pine needles + cones, and with  
tufts of grass.

All species of *U. neogu.* were taken.  
*Mel.* large sh. w. species. 1 ♀ seen + taken.  
Careful search failed to bring any more  
to light.

*Mel. fuscus-nigricans* local and scarce  
Almost all seen taken - 3 of each sex.

*Mel.* small species. A single male taken.

Orth. 8 + 1864 = 1872.

Orth. ins. 6 + 190 = 196

---

1956. 113 1/2 m. S.E. of Station 1956. 112  
Elev. (t. m.) 7369 feet. VIII. 25, 1956  
(R.)

Mountain meadow of tall bunch  
grass and much short grass on  
gravelly silt.



1956. 113 (cont.)

All species of *O. recogn.* were taken.

Tall grass held little, most everything taken was in short grass areas.

Amphispiza miniata.

Agelaius phoeniceus Th. W. on the bare spots.

Amphispiza pseudonivosa, a few seen, 2 taken  
Chrysomitris carolinensis 10 or 15 seen, 1 taken,  
on abandoned roadway

Melospiza long-winged 1 female taken.

" funeraria a few seen, 3 taken

" sp. ? (Th. W.) 1 ♀ taken.

Orth.  $26 + 1864 = 1890$ .

Orth. vis.  $1 + 196 = 197$ .

---

1956. 114 Grasshopper Flat, Yavapai Co,  
(3 ms W of Sedona), Arizona VIII 26. 1956  
(R) Elev (ch) 4400 feet

Bare red silt and tall grass

All *O. recogn.* taken.

Carpodacus, on silt

Corvus, on silt.

Orth.  $4 + 1890 = 1894$

Orth. vis.  $3 + 197 = 200$ .

---



1956 115 Upper Yaeger Canyon below  
Mingus Mtn <sup>road</sup> Summit, Yavapai Co., Arizona  
VII. 26. 1956 (R.) Elev (ch.) 6450 ft.

Narrow shelf in canyon - work  
difficult. Under pine, piñon & oak.

All species of *O.* recognized taken

*Agrostotettix* in that com on broken stones  
*Chrysosterna* car. roadside 2 taken, 3 or  
4 others seen

*Trinervetopsis* blue-wing. A few on broken  
stone area - 2 taken

Med long-winged 1 ♀ taken, all seen  
" sh.-winged. 1 ♀ <sup>in grass</sup> All seen  
in grass.

Orth

$$10 + 1894 = 1904.$$

$$\text{Orth ins.} - 7 + 200 = 207.$$

---

1956 116 Lonesome Valley, 10 ms. NE.  
of Yaeger, Yavapai Co., Arizona.  
VII. 26. 1956. (R.) Elev (ch.) 5300 ft.

Open short grass range on reddish  
silt. ~~to~~ Virtually overrun with  
hoppers, the larger part immature.

Wind very high - seriously hampered work.  
As far as ascertainable I secured all  
species of *O.* which were adult.



Boopedon in swarms. Males more numerous than ♀♀ & very active. Note the relatively long wings of some of the ♀♀, which could fly for some yards.

Alrepanopterna 1 ♂ taken, all unrecognized in the swarms of juvs.

Cyphina sp. 1 juv. taken

Trachyrhachis not partic. numerous, ? taken. On silt.

Trin melanoptera Numerous & very active. On silt. Carried long distances by wind.

Mel. luteus Sw. Adults - only adt Mel. luteus.

Brachystola a number, but all seen taken. In the low ground com. Some taken } are in instar preceding maturity.  
Some adults. General

51 + 1904 = 1955.  
Other ins 0 + 207 = 207



1956.117 1 m. SW of Wilhoit, Yavapai  
Co., Arizona. VIII. 26. 1956. (R.).

Elev. circa 4500 ft Wind exceedingly  
strong.

All Q. clearly recogn. none taken.  
Work was all roadside.

Conoza carinata A few, but not num. 3 Taken

Trachyrhachis A few, 1 taken.

Uth. 4 + 1955 = 1959.

Uth. ins. 0 + 207 = 207.

---

1956.118 3 ms S. of Congress Junction,  
Yavapai Co., Arizona. VIII 26. 1956.  
(R.) Elev. (ch) 2825 feet.

Roadside, tall <sup>brush</sup> grass, scattered acacia  
and bare sandy silt. All spec. Q.  
recognized were taken Many juv.  
Melanophus.

Trimastropis pallid. 1 num - Taken.

✓ Paropornala 1 ♀ taken from brush grass.

Mel. lanius 1 ♂, 1 ♀ Taken from tangled  
low com.

Uth. 8 + 1959 = 1967.

Uth. ins. 4 + 207 = 211.

---



1956. 119 1.5 mo. SE. of Morristown,  
Maricopa Co., Arizona. VIII. 27, 1956. (R.)  
Elev. (am.) 1850 feet.

Thin short grass on gravel, with open fallen  
cones of Covillea, & cholla, pale verde, Koebe-  
linia, etc.

No O. except 1 Rehmita in ground. Nothing  
found in Covillea.

Cuth. 1 + 1967 = 1968.

Other ins. 1 + ~~200~~ 211 = 212.

---

1956. 120 2 mo. SE. of Apache Junction,  
Pinal Co., Arizona. VIII. 27, 1956. (R.) Elev.  
(am.) 1475 feet.

Covillea, pale verde, etc. on strong surface.  
Nothing in O. found except 1 Bostellia  
in Covillea.

Cuth. 1 + 1968 = 1969.

Other ins. 0 + 212 = 212.

---

1956. 121 1 m E. of Thompson, Pinal Co.,  
Arizona. VIII. 27, 1956 (R.) Elev. (am.) 2450 ft.  
Lower bajada vegetation - pale verde,  
cut clow, some cholla & saguaro, Cochulinia,  
etc.

All species of O. recognized taken.

Neopenthetix locally num. in very dry vegetation,  
not rabbit used.



Melan. juv. 1 swept.

Agave 1 juv in fr. All seen.  
Podoceros 1 ♀ on ground. No more seen.

Herotomema 1 juv. " " - all seen.

Cycloptilum 1 swept from Covillea.

Utth. 11 + 1969 = 1980.

Utth. vis. 0 + 212 = 212.

---

1956. 122 Summit of road pass of Pinal  
Mts., betw. Superior & Miami, Pinal-Gila  
Cos., Ariz. VIII. 27, 1956. (R.) Elev. (ch) 4190  
feet.

No Q. at all!

1 sole leaf hopper taken!

Utth. 0 + 1980 = 1980.

Utth. vis. 1 + 212 = 213

---

1956. 123 Betw. Globe and Cutter, Gila  
Co., Arizona. VIII 28, 1956. (R.) Elev. (an.)  
3250 feet.

Very short grass on sandy & stony silt  
with scattered rabbit weed - mesquite.

All species of Q. recognized were taken.

Podoceros a few, 3 taken, very active.

Herotomema only the one taken seen.

Rebriata ditto

Utth. 6 + 1980 = 1986.

Utth. vis. 1 + 213 = 214



1956 124 7ms SE. of Cutter, Gila Co,  
Arizona. VIII 28, 1956 (R) Elev. (an.)  
4100 ft.

Tall grass, particularly along a shallow  
wash, acacia, Notina, thin oak and a little  
cholla. Soil strong silt.

All species of B. recognized were taken.

Parapimpla 1 ad. mpt.  
Amphitomus 1 taken, mpt, all seen.

Psolocassa a fair number, but very active - 1 taken.

Coryza carin 2 ads. - 1 juv. taken, one found.

Trim. Strimma type. 1 taken, all seen.

Cibolensis 1 taken, all seen, <sup>near base</sup> on strong silt.

✓ Paropomala 17, 24 mpt from tall grass.

Leucanthus 1 mpt from thin oak.

Orth. 15 + 1986 = 2001.

Other ins 2 + 214 = 216.

---

1956 125 6ms SE of Coolidge Dam, Pinal  
Co., Arizona. VIII 28, 1956. (R.) Elev. (altim.)  
2500 ft.

Crillia on granly ~~sp~~ silt.

Nothing in Crillia but juv. Melanophus

Trim on silt surface

Orth. 4 + 2001 = 2005.

Other ins. 0 + 216 = 216.

---



1956. 126 6 ms. S. of Safford,  
Graham Co., Arizona. VIII. 28, 1956. (R.)

Elev. (instrument) 3100 feet.

On one side sand and sandy silt  
with a varied open cover. Nothing there  
except 1 Trepidulus on ground. On  
other side acacia & Covillea. No Brotellus,  
but 3 immat. Rhabdosomatites taken  
from Covillea.

Orth. 4 + 2005 = 2009.

Orth. ins. 1 + 216 = 217.

---

1956. ~~128~~ 127 19 ms. S. of Safford,  
Graham Co., Arizona. VIII. 28, 1956.  
(R.) Elev. (altim) 4100 ft.

Short grass and some tall bunchgrass,  
Notula, acacia, cholla, etc. on stony  
silt.

Only 1 seen Trin. strema taken  
on silt surface.

Orth. 1 + 2009 = 2010.

Orth. ins. 1 + 217 = 218.

---



1956. 128 7.5 ms. SE of Bowie,  
Cochise Co, Arizona. Aug 29, 1956.  
(R.). Elev (inst.) 3475 feet.

Bare sandy silt in most spots - nothing  
in it in way of lith.

None or dry wash Covillea - black brush. No  
Bostettia or Gommatum. In Covillea juv.  
Fusca covillea + juv. & adult (?) of  
Rhabdoceratites. Cycloptilum, mpt from  
black brush.

Lith. 40 + 2010 = 2020.  
Lith. vis. 1 + 218 = 219.

---

1956. 129 10 ms E. of San Simon,  
Cochise Co, Ariz. (Just W of N. M line.)  
VIII. 29, 1956. (R.) Elev. (inst. am.) 3900 ft.

Sloping brush with Covillea, black brush &  
again in washes. No O. at all etc 1  
juv. Rhabdoceratites mpt from Covillea &  
1 juv. Mel from same.

Lith 2 + 2020 = 2022.  
Lith vis. 0 + 219 = 219.

---



1956. 130 4.5 ms. S. of Road junction  
E. of Steins, Hidalgo Co., New Mexico.  
VIII. 29, 1956 (R). Elev. (am. of mts.).  
4200 feet.

gentle intrash slopes of Peloncillo  
Mts. Coillea almost entirely -

No 0 at all ex. 2 juvs Drosophila coillea  
in Coillea.

Orth. 2 + 2022 = 2024,

Orth. in 1 + 219 = 220,

---

1956. 131 Southernmost Research Station,  
Can Creek Canyon, Chiricahua Mts.,  
Cochise Co., Ariz. VIII. 30, 1956. (R.)  
Elev. (b.m.) 5400-5500 ft.

Up the canyon floor for 1/2 m above  
station. Corn juniper (2 species) and  
various oaks, a few pines. Ground  
broken stone & heavy silt, with patches  
of grass & weeds, a few Ceanothus (pr.  
pear) & low agave.

All species of C. nigrus were taken.  
Syrphula fuscicornis 1 ♀, all seen, under  
oaks on ground.

Tomonotus ferrugineus a single ♀,  
all seen was taken on ground under oaks  
West but one leg. No others noticed.



1956. 131 (cont.).

Helioctes benjamini 1♂ 1♀ taken separately  
on more strong spots.

Trim. sp.? Two seen, 1 taken, in same  
general area.

Trachyphakia sp. juv. unsp.

Conallaca triumphyana 1♀, near grasses,  
not under oaks, all seen

C. huachuana 1♂, 1♀, taken sep., among  
dead oak leaves on ground under oaks.

Psolocna, a number seen, very active,  
one taken.

Mel. spp. Numerous juvs.

Orth. 19 + 2024 = 2043.

Other ins. 12 + 220 = 232, ✓

---

1956. 132. Same data as 1956 131  
except elev. is 5400 feet only. Above the  
canyon floor for about 1/2 mi. Conditions  
much the same, but little mat. adult.

All species of O. margin taken etc.

1 Grassiniops last running on ground.

Orth 14 + 2043 = 2057.

Other ins 7 + 232 = 239. ✓

---



1956.133 Southwestern Research Station,  
Carr Creek Canyon, Chiricahua Mts.,  
Cochise Co., Ariz. VIII. 29. 1956.

(Montezuma) At night about station  
(6. m. 5400 ft) in cracks of stone walls  
& fences, etc.

Centrophilus & Noplophrys  
Noplophrys.

$$\text{Orth. } 25 + 2057 = 2082.$$

$$\text{Orth. ins. } 0 + 239 = 239.$$

---

1956.134 Same data as 1956.133  
except date is VIII. 30. 1956 (M. Cazier).

Centrophilus, Noplophrys,  
Lygus & juv. Melanophus.

$$\text{Orth. } 9 + 2082 = 2091.$$

$$\text{Orth. ins. } 11 + 239 = 250.$$

---

1956.135. Same data as 1956.131  
but VIII. 31, 1956 (R)

Nothing seen exc. these two Cornucaas.

$$\text{Orth. } 3 + 2091 = 2094.$$

$$\text{Orth. ins. } 0 + 239 = 239$$

---



1956. 136 <sup>So.</sup> ~~South~~ Fork of Carr Creek, 5 ms.  
above Southernmost Research Station, Chiricahua  
Mts., Cochise Co., Ariz. VIII. 31. 1956. (R.)

Elev. 6000 ft.

Heliaetus benjamini on rocks alongside  
of road, but no mark!

Orth. 2 + 2094 = 2096.

Orth. no. 0 + 239 = 239.

---

1956. 137 Barfoot, Chiricahua Mts., Cochise  
Co., Ariz. VIII. 31. 1956. (R.)

Elev 8200 feet. [with William George - Ellen  
Ordway.]

Mountain meadows of tall grass with  
lupine, some mullen - numerous other  
plants, some bare relatively dry meadow  
much, surrounded by heavy forest of pine  
(w. species), oak, hill pine, fir and some  
little aspen. Close to the top of the range.

Chorthippus locally numerous in the grassy  
portion of the meadow.

Trimastix red-legged. Generally numerous,  
active.

Melanophus of regalis type - brilliantly colored.  
Blue tibiae, long-winged. Numerous, general  
but less frequent in tall grass, very active.

Melan. trachypterus red-legged. 10 taken  
all recognized.



Melan. brachypterus ~~was~~ here legged. Relatively  
numerous, more largely in grass areas.

Length.  $65 + 2096 = 2161$ .

Other vis.  $17 + 239 = 256$ .

---

1956 138 Southwestern Research Station,  
Smith Fork Can Creek, Chiricahua Mts,  
Cochise Co., Arizona. IX. 1, 1956 (R.)

Elev (b.m.)  $\approx$  5400 ft.

Attn Station.

In meadowy and boggy spots, partly shaded,  
with short grass and low growth <sup>of willows</sup>, tall corn  
sycamores chiefly and a lower story of other  
shrubs. Ground in places damp and almost  
muddy, appar. from underflow from spring  
or vases washed by rain.

Everything more or less taken. Tettigids  
abundant in spots, but largely immature.  
What is apparently Clypeotettix schubertii predomi-  
nated, although some <sup>or all</sup> may be forms of Paratettix. It  
was more general than Tettigidea.

Tettigidea was more local, in the damper  
areas, and those more fully shaded. Few  
adults.

Melanoplus of the beautiful regalis type,  
1 ad. ♂ and apparently a number  
of juvs. In the meadowy areas.

1 juv melanoplid with deep maroon tibiae, what?



1956. 138 (cont.)

Ellyia a few, swept in with tetragnid

Uth.  $150 + 2161 = 2311$ .

Uth. vis.  $15 + 256 = 271$ .

---

1956. 139 Same data as 1956. 132 except  
date is 1X 1, 1956.

Very few adults, all seen taken.

Protoparce 1♀.

Syrphula fuscicornis 1 ad. ♂ + 1 juv. Under  
oaks and junipers.

Phygadeuon 1♀ on among rocks on stony  
hill slope.

Conalcaea huachuensis. 1♂, 1♀, taken in  
corte, under oaks.

Mel juv. Apparently of a number of  
species.

Uth.  $19 + 2311 = 2330$ .

Uth. vis.  $34 + 271 = 305$ .

---

1956. 140 Southwestern Research Station,

South Fork Cano Creek, Chiricahua Mts,

Cochise Co., Ariz 1X 2, 1956. (R.)

Elev (b.m.) 5400 ft.

Immediate down canyon from  
station in meadow and grassy spots



along the perennial stream of Carr Creek.

Panattix apparently, few adults, numerous in the whole very restricted area.

Tettigidea 1 ad. ♂ taken at same time.

Discosternia carolina 1 ♀ taken on dry cleared place near laboratory.

Uthia benjamini - num. chiefly on bare rock bordering stream course, 13 taken.

No juv. melanophids caught.

Ellipt. Orth. 1 caught with Tettigidea.  
44 + 2330 = 2374.

Other inv. 9 + 305 = 314. ✓

---

1956.141 Same data as 1956.131 except IX.2.1956.

Very, very little. 1 Uth. benjamini run - lost.

Conalanea huachuana (General) 1 ♀ taken among dead oak leaves on the ground. Several others run - lost. Once lost they are almost never relocated, why is the mystery. I think they hide in the quantities of dead dry leaves.

Orth. 1 + 2374 = 2375.

Other inv. 4 + 314 = 318 ✓

---



1956. 142 As 1956 133 but 1X. 2. 1956.  
(Mont Cazier).

Certhophulus 2 or 3 species (1 ♂ is apparently  
valgus or related).

Hoplosphyrum 1 ♂, 3 ♀.

Catch 16 + 2375 = 2391.

Other ins. 24 + 318 = 342 ✓

---

1956 143 As 1956 138 but 1X. 3. 1956 (R.).

Tettigidea 1 ad. - a number of juvs. As  
previously it was found only in the  
dampers, and usually more shaded spots.

Paratettix, more generally as yet predomina-  
tingly immature.

Microsternia carolina 1 ♀ Taken in sunny spot.  
Mel. juv. Scattered.

Catch. 59 + 2391 = 2450.

Other ins. 14 + 342 = 356, ✓

---

1956. 144 As 1956. 132 exc. date is  
1X. 3. 1956.

Aphid juv. 1, all seen, under oaks.

Conogza carinata. 1 ad. in nearly bare  
spot right at station.

Mel. deubroni 3 ♂, all adults located  
in nearly two hours work. Apparently  
many immatures of this.



Orth.  $8 + 2450 = 2458$ .  
Other ins.  $16 + 356 = 372$ . ✓

---

1956. 145 As 1956. 133 but IX. 3. 1956.  
(Mount Cazier)

Orth.  $16 + 2458 = 2474$ .  
Other ins.  $6 + 372 = 378$ . ✓

---

1956 146 Rustler Park, Chiricahua  
Mts., Cochise Co., Ariz. IX. 4. 1956.  
(Mount Cazier - J. H. G. R.). Elev. (B.M.) 8500 ft.  
In fir and pine forest, with several spots  
with springs & seeps, often with considerable  
vegetation, again bare gravel.

Trim pallidus. 1 on bare ground.

" blue-winged Wren on rock slope along  
road cut.

Trim red-legged. On bare ground & among  
shrubs.

Trachyphaps seen on gravelly area.

Melanophus long-winged species. Numerous.

" regalis type. 1 ♂ - 1 ♀ all seen.

" Th. W. species small 1 ♂

" " " larger 2 ♂.

Melanoploid sp. - sp. ? 1 juv. in com. all seen



1956. 146 (Cont.).

Stenopelmatus sp. 1 under stones. This is adult male - full of sperm.  
Certhopeltis 3 specimens, under stones.

Catch.  $62 + 2474 = 2536$ .

Other in.  $18 + 378 = 396$ .

1956. 147 Below Ruether Park, Chincahu  
Mts., Cochise Co., Ariz. 1X. 4. 1956.

(Montezuma - J. H. R.) Elev. (ex M.C.) 8200-8300 ft.

Conditions much as 1956 146 except  
there was no running water, nor seeps.

Trim. red-legged. Moderately numerous.

Mel. long-winged species. Common.

" Th. w. sp. small. Numerous.

" " " larger (looks like a Conabona)  
local and hard to catch.

Aephia juv. a few.

Catch.  $80 + 2536 = 2616$ .

Other in.  $4 + 396 = 400$ .

1956. 148 Same data as 1956. 132 but  
1X. 5. 1956.

Tettigidea 1 juv. taken with Paratettix.  
Paratettix numerous in the damper spots,  
but not especially at water's edge, as was true  
of Ellipes. The first may. not adult as yet.

Ellipes abundant. close to water. Chiefly immature.  
Heterosternus in bare soil near station.

Helicostoma in stones <sup>near</sup> stream bed.



Mel. junc. trupt in grass - under. Range with  
diag. at steps of laboratory.  
Cuth. 77 + 2616 = 2693.  
Other in 7 + 400 = 407. ✓

---

1956 149 As 1956.32 but date is  
IX. 5. 1956 and elevation is 0200-0400 ft.

Almost nothing adult. Rarely under oaks.  
1 ♀ Hydrula fuscicollata - 1 ♂ juv.

Mel. prob. desertorum all same - future.

Unus. Mel. junc. ✓

Cuth. 2 + 2693 = 2695.

Other in. 4 + 407 = 411.

---

1956. 150 Southwestern Research Station,  
Chiricahua Mts., Cochise Co., Ariz.

\* IX. 5. 1956. Heterid at night  
alongside of swimming pool.

Cuth 1 + 2695 = 2696 ✓

Other in. 0 + 411 = 411

---

1956. 151 As 1956. 138 but IX. 6. 1956.

Buggy - grassy spots under ~~bed~~ <sup>low</sup> and  
dense stand of willows, on heided  
from channels.

Elisostoma on lower spots.

Cynobacca on car at station



1956. 151 (cont.)

Paratithys & Tithys as previously taken.  
Adult Tithysidea juv. in both fauna jars.  
greatly outnumbered adults.

$$\text{Orth. } 117 + 2696 = 2813$$

$$\text{Orth. vis. } 14 + 411 = 425. \quad \checkmark$$

---

1956. 152 Can Creek Canyon above Southwestern  
Research Station, Chiricahua Mts, Cochise Co.,  
Ariz. IX. 6. 1956. Elev 6150 feet (approx.).  
In tall grass over on lower slope under  
oaks, juniper & some pine. Very little.

Trin. red-legged. About five seen, two  
taken, no stringer found.

Mel. deserticus n. sp. Two seen -

Taken. 1 juv apparently this, also Taken.  
1 Conal caca huachucana seen - lost

$$\text{Orth. } 5 + 2813 = 2818.$$

$$\text{Orth. vis. } 2 + 425 = 427. \quad \checkmark$$

---

1956. 153 Southwestern Research Station,  
Chiricahua Mts, Cochise Co., Ariz IX 7. 1956.  
Elev (b.m.) 5400 ft. (R.) In grounds  
of Station at laboratory.

Blissotia carolina 1 in mud.

Trachytachina 1 on bare ground.

Mel. sp. ? 1 adult - juv.

Mel. prob. diff. 1 juv.



Orth 6 + 2818 = 2824.  
Other ins. 0 + 427 = 427.

---

1956. 154 Vic of Smithsonian Research

Station, Chumohua Mts., Cochise Co., Ariz

IX 7. 1956. (R.) Elev. (b.m.) 5400 ft.

Small pasture along Can Creek immediately below  
the station. Wet sand bars, damp grassy spots  
with some clover and adjacent dry slopes with  
scattered tall grass under good stand of oaks  
& juniper.

Paratettix in damp places.

~~Helio~~ Helio a few on drier spots.

Mel. sp. on the drier slopes, a limited  
number adults.

Ellipes num. on sand bars particularly.

Orth. 53 + 2824 = 2877.

Other ins. 12 + 427 = 439.

---

1956 155 As 1956. 131 but IX.7 1956.

Work almost entirely (as far as results were  
concerned) done in the large dry wash of  
one of Can Creek channels, or on the brush  
just above this wash. Clearcast, or. spitting  
rain.

Immature Pedro very small, swept from <sup>dead</sup> oak leaves  
on brush above wash.

Helio benjamini, local. apparently in small



1956. 155 (cont.)

colonies in rocks in wash and on stony and gravelly surface of bank above the wash. Two pairs were mated when captured.

Conalanea lachrymans 1♂, 1♀ Taken not far apart among dead oak leaves and fungi on bank of wash. The male, when pursued, hid in among the dead oak leaves.

Arith.  $18 + 2874 = 2892$  ✓  
Other ins.  $4 + 439 = 443$

1956. 156 3 mi N.E. of Douglas, Cochise Co., Ariz.  
IX 7. 1956 (John Gordon Anderson.)

Elev. (check on chart) Along highway.  
c. 4500 feet

Tamias, 1 ad - 2 immat

Arith.  $3 + 2892 = 2895$   
Other ins  $0 + 443 = 443$

1956. 157 Also 1956. 131 but IX. & 1956. (R.)  
Work done a little more extensively, covering areas of boggy swampy overflow.

Paratettix num. but largely juv.

Tettigidea in fair num. localized in the wetter spots, but only two taken were adults.

Ellipses local.

Mal. juv. 1 kept.

Arith.  $65 + 2895 = 2960$

Other ins.  $14 + 443 = 457$



1956. 158 Fort Huachuca Research Station,  
Chiricahua Mts., Cochise Co., Ariz. 1X.8. 1956.  
(HWR.) In house. 1 Cnethophorus.

Cneth. 1 + 2960 = 2961.

Other ins. 0 + 457 = 457.

---

1956 159 As 1956 131 but 1X.9. 1956. (R.)  
Work done chiefly in <sup>dry</sup> wash and in pockets  
of dead oak leaves, twigs - branches under  
oak, juniper, rock walnut, etc.

Trin blue legged - blue winged. 1♀, all seen,  
taken on boulders in dry wash at about 5500ft.

Helioastus benjamini local, in small  
colonies, on boulders in wash or on hog-backs  
with sand & boulders between the ramifying  
channels of the wash. A number taken.

<sup>Trin</sup> Conalaca blackmanae <sup>oak</sup> very local in scattered  
colonies among dead leaves, or more  
rarely branches. Exceedingly agile, and  
once missed usually succeeding in eluding  
capture by diving into deep masses of dead  
leaves or piles of intertwined dead twigs  
or branches. Some taken one funeral.

Cneth. 31 + 2961 = 2992.

Other ins. 20 + 457 = 477.

---



1956. 160 As 1956. 140 but 1x. 9. 1956.

Paratettix in short grass and along  
creek on south. No Tettigidea seen.

Helastus benjamini A few in more  
thick areas.

Trux red-legged. A single ♀ in thick  
area.

Conalaca huachucae A few short  
pickets of dead oak leaves and twigs and  
branches. As common as grass. Two  
♀♀ taken.

Hebertia a few in bare ground north.  
1 taken.

Stegomyia lineata - 1 ♀ swept  
from a flowering composite.

Callipes in numbers on wet mud along  
creek with.

Length.  $49 + 2992 = 3041$ .

Other no.  $8 + 477 = 485$ .

---

1956. 161 Southwestern Research  
Station, Can Aish Canyon, Chiricahua  
Mts., Cochise Co., Ariz. 1x. 9. 1956.  
(Montezuma.)

In crevices of walls and similar  
places at night.



Anthrophilus, Stenopelmatus (1) = Nephtodipyrus (1)  
Orth. 15 + 3041 = 3056.

Other ins. 93 + 485 = 578, ✓

1956 162 Mouth of Carr Gulch Canyon,  
1/2 m. above Portal, Chiricahua Mts,  
Cochise Co., Ariz. 18.10.1956. (R.)  
Elev (ch.) 4800 ft.

On gently sloping and broad outwash  
fan of canyons, with many bare areas of  
gravel - small stones, <sup>and</sup> dotted with relatively  
low clumps of mesquite and an open  
stand of bunch grass (latter in large part  
semi-cured).

Heterocentria 1 ♂ (th. co.) running on ground  
Chaphromera (Fernal) 1 ♂ swept from bunch grass.

Polocoma a few adults, 1 taken, on gr.

Trachydactylus not num. but present as  
adults - imm. On gr.

Rehmita a few, in grassier areas. 3 ♂ taken. = 1 juv.

Cibolensis a few, ads. - juvs. On bare areas.

Trim. sterna type, few, 1 ad. - 1 juv. Taken.

Mel. sp 1 juv. - all seen.

Hectyloctenus 1 juv. Taken, all seen.

Arctocera 1 juv. swept from bunch grass.

Orth. 23 + 3056 = 3079.

Other ins. 0 + 578 = 578.



1956 163 Canyon of South Fork of Carr Creek,  
Chiricahua Mts., Cochise Co., Ariz. IX. 10. 1956.  
(R.) Elev. (ch) 5400 ft.

About  $\frac{1}{2}$  above junction with road up to  
S.W.R.L. + on up to range crossing.

Oak, juniper + <sup>and very few pines,</sup> sycamore, on strong, dry  
wash with small areas of nearly level  
but strong surface with oak scrub. Undergr.  
dense with few open spots, there with some  
brush grass. Surface largely carpeted with  
dead oak leaves.

Chrysomelids 1 juv. rupt, appar. from  
brush grass.

Conalaca huachuana. A few on oak  
leaves. 2 ♂, 1 ♀ Taken.

Mel. sp. (Ph. w.) 1 ♀ Taken, unprocessed,  
all seen.

Oecanthus 1 ♂ (green) + 1 ♀ (brown) - I do  
not think this is any species not already known  
from Ariz. Both rupt from brush grass.

Orth. 7 + 3079 = 3086.

Other ins. 5 + 578 = 583.

---

1956. 164 As 1956. 133 but IX. 9. 1956  
+ coll. Other Ariz. way.

All Certhophila.

Orth. 5 + 3086 = 3091

Other ins. 0 + 583 = 583.



1956. 165 As 1956. 138 but  
1x. 10. 1956. (R.)

Conditions the same.

Paratettix. Quite numerous, chiefly  
immature, more frequent in the meadowy  
areas than the following.

Tettigidea. Locally numerous, usually  
with Paratettix, but only in the more  
moist regions. No adults taken.

Ellipes a few.

Orth.  $80 + 3091 = 3171$ .

Orth. no.  $4 + 583 = 587$ .

---

1956. 166 Southwestern Research Station,  
Can Creek Canyon, Chiricahua Mts,  
Cochise Co., Ariz. 1x. 10. 1956 (Elev. 6,000 ft.)

5400 ft. All these Ellipes underway;  
phaseoid M. Cazier. Night work.

Parabacillus <sup>walking</sup> at swimming pool. Monstrated  
Paratettix <sup>camp</sup> crucis at pool. catalpa.

Chlorodina day times attracted to light.

Mel. diff. 1♀ ditto.

Conalaca <sup>to w.</sup> brachyura 1♀ ditto.

Hoplophyrus 1♀ ditto.

Orth.  $24 + 3171 = 3195$

Orth. no.  $2 + 587 = 589$ .



1956.167 As 1956.131 but IX.11, 1956. (R.)

Yuccinia 1 ad. running as ground under oaks.

Helictes benjamini a few - not numerous in the usual situations

Conallaca brachyura about 8 seen, 4 Taken - 3 ♀ 1 ♂. Very local and always near oak leaves - tremendous jumper.

With. 8 + 3195 = 3203.

Other ins. 10 + 589 = 599. ✓

---

1956.168 As 1956.154 but IX.11, 1956. (R.)

Helictes carolina a few, 2 Taken. <sup>54600</sup>

Helictes benjamini few seen, 2 Taken

Mel. th.w. species. A number adult, juv. common. On grassy areas back from the stream among or near the oak & related com.

Paratettix few adult - many juv. on sand bars in grass along water.

With. 36 + 3203 = 3239.

Other ins. 4 + 599 = 603. ✓

---

1956.169 As 1956.131 but IX.12, 1956. (R.)

Helictes benjamini local, on sandy spots



as well as on boulder.

Conalaea huachuana also local,  
but almost always on or very near dead  
oak leaves. As shown as seen,  
each on a specific stalk. Secured all  
seen but two (i.e. 7 of 9).

Mel. H. - w. species Annual adults, in  
prairie spots

$$\text{Cuth.} \quad 14 + 3239 = 3253.$$

$$\text{Other no.} \quad 2 + 603 = 605.$$

---

1956. 170 Southwestern Research Station,  
Carr Creek Canyon, Chiricahua Mts.,  
Cochise Co., Ariz. IX. 11. 1956. (M.  
Cazier)

17 Stagmomantis on tall composite.

$$\text{Cuth.} \quad 1 + 3253 = 3254$$

$$\text{Other no.} \quad 0 + 605 = 605$$

---

1956. 171 Same as 1956. 170 but  
IX. 12. 1956. (R.).

14 Stagmomantis on weeds at Station. ✓

$$\text{Cuth.} \quad 1 + 3254 = 3255$$

$$\text{Other no.} \quad 0 + 605 = 605$$

---



1956. 172 As 1956. 138 but IX. 12. 1956.  
(R.)

Tethigides nummulus, left local, but 4 adults taken.  
the remainder chiefly in earlier preceding  
maturity.

Paratethis numm., part adult, part immat.

Helicostes benjamini 1 on sandy spot.

Orth 62 + 3255 = 3317.

Orth via 9 + 605 = 612.

1956. 173 As 1956. 170 but IX. 12. 1956.  
(M. Cazier). About Station.

Synchlora fuscostictata 1♂, 1♀

Trachyrhachis orth numm.

Helicostes benjamini orth numm.

Trimerotropis red-tipped, 1♀.

Corozon carinata a few.

Conalene huachuana orth numm.

Mel. th. w. considerable mass of shells.

Photulistes 1 ad. Plung unig.

Orth. 64 + 3317 = 3381

Orth via. 13 + 612 = 625.

1956. 174 As 1956. 138 but IX. 12,

1956. (Allen Ordway)

Paratethis + Tethigides (227 adult).

Orth. 72 + 3381 = 3453

Orth via. 0 + 625 = 625



1956.175 U.S. 80 crossing of Peloncillo  
Mts, 19 ms. N. of Rodas, Hidalgo Co., N.M.

IX.13.1956. (R.) Elev (ann. of mistman)

4200 ft.

Patches of bunch grass and masses of  
yellow-flowered composites among mesquite  
mats, acacia, ~~also~~ Nolina, yucca, nopal & cholla.  
with num. bare areas of stony ground.

In addition to those taken I had 1 ♀  
Acanthodes in net, but lost it. Recognition,  
common, as a position.

Trin pallidip. on silt.

" Strana type, ditto.

Mel. R. w. beaten.

Conakasa lumphreysii in a tall rather fleshy  
yellow-flowered composite - all seen.

✓ Paropomato in bunch grass.

Utter 6 + 3453 = 3459.

Utter in. 7 + 625 = 632.

---

1956.176 Continental Divide, 1 m. E  
of Loper, Grant Co., N.M. IX.13.1956.  
(R.) Elev. (b.m.) 4585 ft.

On one side loose silt and gravel on  
beled adobe with almost nothing on it; but



1956. 176 (cont.)

Scattered depauperate black brush - Two adult Goniatus all taken here, and it: on the other side small area of tangled long grass, some acacia and bushy composites and some black brush (6 juv. Goniatus in this latter).

All material other than the two adult Goniatus taken in the second area.

Parabasilus 1 in tall grass.

Apeia juv only, rapt.

Goniatus, as above, all seen.

✓ Paropromela juv. ♂ + ♀ rapt from grass.

Mel. juv. rapt.

Orth. 11 + 3459 = 3470

Orth. ins. 6 + 632 = 638.

---

1956. 177 13.5 mo. W. of Hennessey, Luna Co.,  
N.M. 1x. 13. 1956. (R.) Elev. (am.) 4075 ft.

Roadside heavy brush grass, sphydras, etc.

Everything taken from first mentioned.

Many <sup>very</sup> juv Melanophus.

✓ Parabasilus 1 ♀ pinkish

✓ Paropromela 1 ♂, 1 ♀.

Mel sh. w 1 ad. ♀

Orth. 4 + 3470 = 3474.

Orth. ins. 4 + 638 = 642.

---



1956 178 3 ms. E. of Heming (12m. N.  
of N base of Little Florida Mts.), Luna Co.,  
N.M. IX. 14, 1956 (R.) Elev. (an.)  
4160 feet.

Covillea on low bush All Q. taken were  
secured from it

Nothing seen on ground surface.

Stagnomantis 1 ♀ swept from Covillea,  
Protuber most numerous but local in  
Covillea. largely adult.

Orth. 15 + 3474 = 3489

Orth. ins 1 + 642 = 643

---

1956. 179 Sink of Mimbres, 16ms. E of  
Heming (N.E. of Little Florida Mts.),  
Luna Co., N.M. IX. 14, 1956 (R.) Elev.  
(an.) 3950 ft.

Thence salt grass on dry sink flat. Nothing  
seen except what was taken.

✓ Paropromela juv. 1 taken.

Tropidolophus 2 juv. diff. instars.

Juv. melanoptera 1 taken.

Orth. 4 + 3489 = 3493.

Orth. ins. 1 + 643 = ~~643~~ 644

---



1956. 180 East side of San Augustine Pass,  
Cibola Mts (directly E. of San Pedro Peak),  
Huerfano Co., N. M. IX. 14, 1956. (R.)  
Elev (an.) 5475 feet.

Timble weed, scattered brush grass, many tall  
yellow-flowered composites, etc.

Herotoma h. laticincta 1 ♀ on ground,  
all seen.

Rehenta 1 taken on ground, another seen &  
lost.

Cibolensis 2 very small juvs. taken on ground.

Mel. ph. w. (laticincta?) Numerous, particularly  
in timble weed.

Hemitylus 3 seen, 2 taken, on fr.

Utah.  $26 + 3493 = 3519$

Utah in.  $2 + 644 = 646$ .

---

1956. 181 Tularosa Valley, 39 mi SW of  
Alamogordo, Huerfano Co., N. M. IX. 14, 1956.  
(R.) Elev (an.) 3775 ft.

The relatively rich but very dry roadside  
vegetation. Black of fence Mt. Res.  
with some almost complete removal.

Black brush present (but no Goniatum),  
yellow-flowered composites, Kochlinia,  
brush grass, etc.



No 0 at all etc. 1 Pseudomyle  
except from composites.

Orth. 1 + 3519 = 3520.

Other ins. 0 + 646 = 646.

---

1956. 182 4 ms. N. of Alamogordo,  
Imperial Co., N.M. 1X. 15. 1956. (R.).

Elev. (an.) 4450 ft.

Coriller on flat - everything taken except  
from or picked from same. Nothing seen on  
ground surface.

Stagnomantis 1 ♀ (narrow costal field) from  
Cor.

Rhabdovestitus 1 ad. ♂ 2 ad. ♀ - 2 juv. from  
same. ♂ on a terminal spray.

Boottia, a number of adults - no juv. in  
diff. instars.

Mel. th. w. sp. 1 ♂ in Coriller.

Insara - the vagrant sp. - 1 ♀ in Coriller.

Arctia 1 very small juv. except from Cor.

Erasmia 1 ♀ except from Cor

Orth. 24 + 3520 = 3544.

Other ins. 2 + 646 = 648.

---



1956. 183 Tularosa Canyon, Sacramento  
Mts, 2 ms. blw Bent (10.5 ms. E. of Tularosa),  
Utter Co., N. M. 1X. 15, 1956. (R.) Elev. (an.)  
5700 feet.

Scattered piñon & juniper with low mesquite,  
brush grass & a little Atriplex. Very few Q.  
On granully tilt surface only red-legged Trin.  
& juv. Acrolophus & ~~1~~ <sup>stagnant</sup> ~~stagnant~~ swept from  
Atriplex.

Clith.  $\frac{1}{2} + 3544 = 3548$

Clith. ins.  $5 + 648 = 653$ .

---

1956. 184. 2.5 ms. NE of Mesalero, Mesalero  
Indian Reservation, Utter Co., N. M. 1X. 15, 1956.  
(R.) Elev. (ch.) 7100 feet

<sup>open</sup>  
Areas with grass and weeds in pine  
woods. Everything recogn. was taken except 2  
Microst. caerulea lost.

Parabambus 2 ♂ swept from tall grass.

Juv. Antitettix swept from ground cover.

Agrostotettix 1 ♂ on gr.

Chorthippus locally comm. in grass - not  
found. No juv. taken.

Juv. Orthocentrus of at least sev. genera on  
barren ground.

Cnemidophorus local, both sexes taken

Trin. Thurmonia 1 ♂, all seen.



Mel. th. w. species few. Recogn. no male.

Orth.  $32 + 3548 = 3580$  ✓

Orth. vis.  $42 + 653 = 695$ .

1956. 185 Upper Rio Grande Valley, 2 ms. NE  
of Gum Tree, Lincoln Co., N.M. 14.15. 1956.  
(R.). Elev. (am.) 6000 ft.

Roadside grass, weeds & bare spots of  
gravelly silt. All species recogn. none  
taken.

Encyrtophorus a few seen, 4 taken in low  
weeds.

Harotumma - a single ♀ on banana.

Argia pseudomistana sev. seen, long  
flying, 1 taken.

Trin. melanopterus Locally numerous,  
particularly on area, good series taken.  
not as they are usual for large species  
of this genus. (Note the orange-red ventral  
Brachyptera 1 ♂ in weeds. Inf. in both  
eyes)

Mel. parhardi 1 ♀ taken.

" th. w. species a few, both eyes  
taken.

Orth.  $29 + 3580 = 3609$ .

Orth. vis.  $6 + 695 = 701$ . ✓



1956. 186 Bttr. Tinne + Picacho, 2.5 ms.  
E of Tinne, Lincoln Co., N.M. 1X. 15. 1956.  
(R.). Elev. (am.) 5250 ft.

Roadside tall weeds and yellow-flowered  
composites, thistle, sandpaper and tall  
brush grass.

All species recognized taken.

Opia a single ♂ taken

Arphia pseudonistana, a single ♀ seen + taken.

Trin. melaug. 14 seen + taken - all noticed

Campylacantha seen, only on the yellow-  
flowered composites.

Mel. M. w. seen, several.

Photolista seen, + several.

$$\text{Orth. } 45 + 3609 = 3654.$$

$$\text{Orth. m. } 9 + 701 = 710.$$

---

1956. 187 Lincoln-Chaves Cos. line on U.S. 70,  
11 ms. E of Riverside, N.M. 1X. 15. 1956.  
(R.) Elev. (am.) 4500 ft.

Very dry rolling high plains conditions.  
Mat. concentrated in the mixed vegetation  
of a dry arbovit drain, etc. Repsan. c  
Photocsa, which was on gravelly silt.



Psolocara, 1, as atom.

Myrmopterus 2 ♂, as atom.

Opeia, 1 ♂.

Tropidolophus, 1 very female ♀.

Phaenocarpa, a number of imm.

Mel. th. - w. sw. ad. ♂.

" thomasi 1 ♂. All seen.

Campylacanthus 1 ad ♀ - 1 juv. Taken.

Orth. 15 + 3654 = 3669.

Other ins. 2 + 710 = 712.

---

1956. 188 4.5 mo. N. & of Roswell,  
Chaves Co., N. M. 1X. 16. 1956. (R.)

Elev. (an.) 4250 ft

High plains, very dry, tangled and largely  
dead grass, thistle, some yellow-flowered  
composites (low) + a little tumble weed.

Very limited D. - all seen. Taken.

Agrostis 1 Taken, on pr., all seen.

Tropidolophus 2 ♂ Taken, 1 other seen.

Campylacanthus a few, 2 taken,  
in composites.

Mel. 1 species 1 spec. Taken, all noticed.

Cycloptilum 1 swept.

Orth. 11 + 3669 = 3680.

Other ins. 3 + 712 = 715.



1956. 189 21 mo. NE. of Roswell [1 m. SW.  
of Melma, one of our 1921 locs.], Chaves Co.,  
N. M. 1X. 16. 1956 (R.) Elev. (an.) 4200 ft.  
Low stony bunch above general improved.  
land with small patches of Covillea sole  
Q. beaten out of Covillea was Cycloptilum.  
All other mat. from prairie or scattered  
low bunch grass or low yellow-flowered  
composites.

Cordillaria 1 juv.

Rehnia 1 ♂, another seen.

Trim strema-type, 1 ♂, 1 ♀ taken, no other  
seen.

✓ Paropomala 1 juv. single

Cycloptilum, no other

Utah 9 + 3680 = 3689.

Other ins. 2 + 715 = 217.

---

1956 190 5.5 mo. NE. of Highfinesome,  
(betw. Roswell & Elkins), Chaves Co., N. M.  
1X. 16. 1956. Elev. (an.) 4575 ft. ✓

On reddish sand - many narrow leaved  
yuccas, composites, thistles - tall grass.

Parabucculus both sexes adult, chiefly in  
tall grass.

Pseudoceryle both sexes adult, usually in  
composites ("rabbit weed").

✓ Paropomala in tall grass.



Trimerotropis sp. likely 1 seen - taken. On  
bare sand.

Campylorhiza - Hesperotettix (only  
1 seen) in rabbit used.

Arthropus swept from same.

$$\text{leth. } 29 + 3689 = 3718.$$

$$\text{leth. ins. } 21 + 717 = 738.$$

---

1956. 191 15.5 ms. ENE. of

Elkins, Chaves Co., N. M. (near Roosevelt Co.  
line). IX. 16. 1956. (R.) Elev. (air.) 5700 ft.  
~~4200 ft~~

Very low thin oak (2-2 1/2 feet), in thick mat,  
yucca, some bunch grass, much bare reddish  
sand, which underlies all.

Everything clearly unique. was taken - exc.  
1 Trim. of the same species taken at  
1956. 190. No more of it could be located.

Parabrevulus 1♀ taken, swept.

Mel. flavidus type. 1♀ taken.

" "quadratus" type. 1♂ "

Juv. Acridinae. nr.

$$\text{leth. } 7 + 3718 = 3725.$$

$$\text{leth. ins. } 6 + 738 = 744.$$

---



1956. 192 8.6 ms N.E. of Alfrida,  
Roosevelt Co., N.M. IX. 16. 1956. (R.)  
Elev. 4200 ft.

Sunflowers, Fumelle-weed, & num. other  
low elements of plains com on red sand.

Parabaculus 20. 20. 20. Wind strong.

Heratoma 10, 24 on sand

Phaenocarpa 19 on sand

Hesperia (one damaged ♂) on sand, all seen.

Tropidolophus 1 on sand, all seen

Campoplexanthus 10. 20. 20.

Mel. 3 species appar. taken. Two very strong  
fliers, carried long distances by wind.

Dist. 18 + 3725 = 3743.

Altitude 6 + 744 = 750.

---

1956. 193 10.5 ms. NNE. of Portales, Roosevelt  
Co., N.M. IX. 16. 1956. (R.) Elev. approx.  
4150 ft.

Roadside - Fumelle-weed, sunflower &  
var. other plants on reddish sandy & grassy  
hill. Wind strong.

Spharagemon 1 taken on sand - all seen.

Mel. "guadratus" - 1♀.

" flavipes types. 2 species taken -  
very strong fliers.



Campylacantha a few, quite  
small - perhaps immature.

Cycloptilum 1 mpt

Orth.  $12 + 3743 = 3755$ .

Other ins.  $5 + 750 = 755$ . ✓

---

1956. 194 Between Clovis & Texico

[2.0 ms. E. of Clovis] Curry Co., N. M.

IX. 17. 1956. (R.). Elev. (am.) 3900 ft.

Plains vegetation - dry drain with tall  
grass & weeds.

Mermiria reorner. in tall grass, which  
is in part grass and where curing  
red brown.

Campylacantha - num. chiefly in weeds.

Phortakotes a number.

Mel. laticornis type. numerous.

" flavipes type - a few, 1 taken.

" robust species - 1 ♂, 1 ♀, very few  
seen.

Oecanthus mpt.

Orth.  $27 + 3743 = 3770$ .

Other ins.  $3 + 750 = 753$ . ✓

---



1936 195 1m. NE. of Bovina, Parker Co.,  
Texas. 1X. 17. 1956 (R) Elev. (am) 3660 ft.

Two areas - one ~~badly~~ greatly dried up  
grassland roadside area, most species  
taken there; the other one of tall reeds  
along the edge of a ~~now~~ nearly dry slough  
of Running Water Creek [but no running  
water now], 4-6 feet high veget. All Mermiria,  
Mel. fennii: rubrum - M. diff. were taken there,  
also some Mel. labialis type, which was  
also general in occurrence.

Synaldis 2♀, all seen, in the low grassland  
Mermiria macul. & M. n. coners. both in the  
reeds, as ment. above.

Phlebotomus a few females in the low grassland.  
Very large.

Cepia - a few, same area.

Tropidolophus 1 taken in low area, all seen.

Phortalestes, a few in reeds.

Mel. labialis common, general.

" diff. 1, all seen, in tall reeds.

" f. rubrum in all tall reeds, a few.

" "quadratus" 1, all seen.

Oecanthus 1 rept.

Lev. 43 + 3770 = 3813.

Altitude 3 + 753 = 756.



1956. 196 3 ms. NE. of Summerfield,  
Deaf Smith Co., Texas. IX. 17. 1956. (R.)

Elev. (est.) 3650 ft.

Badly dried up great plains yert.-  
grass, trample-mat, with much dead.

C. fairly numerous. All species new.  
Taken.

Diapheromera bile 1 ♂ hater.

Ageneotettix - no. from ground surf.

Mercuria maulip. a few - in tall yert.

Campylacantha not num. - small series taken

Oecloplides num. - very active, chiefly in  
the burned up corn.

Brachyotus 1 ♂ hopping in dried up yert.

Brachyotus 1 ♂ on ground.

Mel. labialis type num., several.

" "quadratus" a few.

" littatus 1 ♂, all seen.

" fordus? 2 ♀. all seen.

Ceanothus a few swept.

Utah.  $51 + 3813 = 3864$ .

Utah ins.  $10 + 756 = 766$ .



1956.197 2 ms. SW. of Umlinger,  
Randall Co., Texas. 1x. 17. 1956 (R.)  
Elev. (am.) 3250 feet.

Weedy and very dry plains vegetation,  
much dead, many tall dry weeds,  
some grass, mostly low and dead, bare  
spots of silt.

All species of *O. recognized* were taken  
exc *Arphia ponderositars* (but 1 seen) &

~~*Lepus* (sev. but very long flying) & *Tropidophorus*~~  
of which I was later

*Chrysomela* 1 taken on ground.  
*Herodias*

*Spharagnum* " " " "

*Lepus*, about 4 seen, 1 ♀ taken, flying  
tremendous distances.

*Trim. pallidip.* sev on fr. taken

*Tropidophorus* a few, 2 ♂, 1 ♀ taken. Found  
up on legs.

*Campylomma* sev. seen, 1 taken.

*Aeroplides* but a few noticed, 4 taken.

*Med. laticornis* type, a number, sev. taken.

" *diff.* a few, 2 taken.

Utter 19 + 3864 = 3883.

Utterius 3 + 766 = 769.



1956.198 4.5 mo. NE. of St Francis,  
Carson Co., Texas. 1x. 18. 1956. (R.)

Elev (an.) 3525 feet.

Dry drainage ditch betw. RR. track  
and highway, full of tall dry weeds. Else-  
where ploughed or cultivated.

Astilbes abundant and very common, chiefly  
in tall rank weeds.

Campylacantha, not numerous, local.

Mel. laevis type, abundant, several.

" diff. a few, 1 taken.

" flavida<sup>type</sup> 1 taken, all new.

" ferrugineo-rubra a few.

Ceanothus 1 sept.

With 59 + 3883 = 3942

Other ins. 1 + 769 = 770

---

1956.199 3 mo. NE. of Panhandle,  
Carson Co., Texas. 1x. 18. 1956. (R.)

Elev. (an.) 3400 ft. Wind very high!

Tall, largely sun-cured, grass on roadside  
(elsewhere grazed out or cultivated), some  
short grass areas.



1956. 199 (cont.)

Mermiria - both maulip & neomex - always  
in the taller grass, and drifting far with the  
very strong SW. wind.

Upeia about the short-grass areas.

Agrostellus near the ground.

Eristalis 1 ♂. juv. nupt.  
Photostolus mermanus.

Mel. calurus 1 taken

" ferus - rubens 1 taken.

Campylacantha few, 1 taken.

Orth.  $29 + 3942 = 3971$ .

Orth. ins.  $0 + 770 = 770$  ✓

---

1956 200. 6 ms. E. of Pampa, Gray Co.,  
Texas. 1X. 18. 1956. (R.) Elev. (an.) 3050 ft.

Wind exceedingly high!

Mowed roadside drain - very little O.  
All adj. ground ploughed.

Campylacantha - a few.

Mel. calurus - ditto

" "quadratus" 1 ♂, album.

" ferus - rubens. 1 ♀ taken.

Cicanthus nupt

Orth.  $9 + 3971 = 3980$  ✓

Orth. ins.  $9 + 770 = 779$  ✓



1956 201 5 mo. SW. of Miami, Roberts  
Co., Texas 1X. 18. 1956. (R.) Elev. (am.) 2650 ft.

Along <sup>wind very high</sup> or near bank dry stream bed  
trib. of Red River Creek (this a branch of  
the Canadian system). Exceedingly dry  
tall grass, various weeds, some fully dried  
up and dead, yucca, etc.

Ceritettix Very small juv. impt.  
Apria a few, close to ground.

Agonotettix a number, on ground.

Murvinia remon. active.

Schistocerca lineata free flying, going  
long distances with the aid of the wind.  
Saw 6 seemed to.

Phaetolites a few.

Mel. pachardi a few.

" diff. took 1, all same.

" f. - rubrum 1 D. taken.

Crab. 26 + 3980 = 4006.

Other ins. 7 + 779 = 786.

---



1956. 202 2 mo. NE. of Miami, Roberts  
Co., Texas. 1X. 18. 1956 (R.) Elev. (an)  
2550 feet. Mind my life.

Under or near dense stand of  
cottonwood trees along now dry stream  
course.

All Tettigoniidae were taken in or near  
shade.

Acrida 1 taken out in sun - all seen.  
" juv. ? 1 swept.

Phantasiotes 1 ♀ swept.

Me. femur-nigrum 1 ♂ swept.

" diff. a few, a pair taken.

Urch. 2 ♂ + 1 ♀ taken, all seen. } Search made  
for more. }  
Conosiph. 1 ♂, 3 ♀ " , " " } no success.

Orth. 13 + 4006 = 4019.

Orth. ins. 2 + 786 = 788.

---

1956. 203 3 mo. NE. of Canadian  
River at Canadian, Hemphill Co.,  
Texas. 1X. 18. 1956. (R.) Elev. (an.)  
2440 feet.

Sand hill type of plains, with surface



almost entirely sand. Cover chiefly  
woods - largely sandpear - and hackberry  
tangles of great density. Wind high

Very little O.

Mel. diff. the species taken - 1

Sch. lineata present, but taking refuge in  
the ~~impenetrable~~ impenetrable hackberry  
tangles.

Orth.  $1 + 4019 = 4020$  ✓

Utter ins.  $8 + 788 = 796$

---

1956.204 6ms. NE. of Glazier,  
Lipscomb Co., Texas. 1X. 18. 1956.

(R.) Elev. & approx.  $2400^{\circ}$  feet.

High wind.

Very dry high plains grassy swale. Very little  
O.

Everything mogn. taken exc. 1 Paropomala  
nyom. lost!

Merm. neomer. 1 ♀ taken.

Schistoc. lineata 1 ♀ taken (this seen).

Campylacantha 1 taken

Mel. diff. 1 Taken.



1956.204 (cont.)

Mel sp. 2 1 taken

" " 3 1 taken

" " 4 1 taken

Orth 7 + 4020 = 4027.

Orth ins. 0 + 796 = 796. ✓

1956 205 2 ms. E of Arnett, Ellis Co., Oklahoma.  
IX.19.1956 (R) Elev (am.) 2220 feet.

Mid high

Plains vegetation with much grass, sand-  
spur and clumps of tall brush grass. Small  
areas of almost bare sand.

Stegomyia giv. most from com

Eritetix 1 juv. most from ground.

Agrostetix on ground.

Asphix juv. on ground.

Hesperetix speciosus a few, 2 taken.

Campylacantha not seen, 3 taken

Chistocerca lucata 1 taken.

Mel. mex. 1 ♀ taken

" flavus numerosus (blue thae)

" " red. Deus (red fil.)



Cecanthus 1 impd.

Cesth. 26 + 4027 = 4053.

Other ins. 1 + 796 = 797. ✓

---

1956. 206 5.5 mi. E of Harmon,  
Ellis Co., Oklahoma. 1X. 19. 1956. (R.)

Elev. approx. 2125 feet.

Small low oak thickets interspersing  
prairie grassland conditions and plant  
types - much sandspur. Very little

Agrostis on ground.

~~Sphaer~~ Spharagemon on bare ground.

Campylacantha very few, 1 taken.

Schistocerca lincolni hiding in oak thickets.

1 ♂ taken.

Mal. 2 spp. of the flavipes type.

flying into oaks when pursued.

Cesth. 7 + 4053 = 4060

Other ins. 1 + 797 = 798.

---

1956. 207 5 mi. E. of Vici, Nowata  
Co., Oklahoma. 1X. 19. 1956. (R.)

Elev. (altim.) 1700 feet.

Near dry drain. Tall rough grass,  
sandspur, Furcraea - weed, etc., with bare patches



1956.207 (cont)

of sandy ground.

Stegomantis 1 juv. mpt.

Ceritettix 1 juv on ground.

Agrostettix on ground.

Pharagmus on sandy ground

Mel. lachinus type 1 ♀ taken.

" "guadratus" 2 ♂, 1 ♀ taken.

" brittatus 2 ♀ taken

" obtusatus 1 ♂, 2 ♀ taken

" fenn-rubrum 1 ♀ taken

" mexicanus ? 1 ♀ taken.

" sp. ? tw. taken.

Protolites 1 ♀ taken.

Oecanthus 3 mpt.

Orth. 22 + 4060 = 4082,  
Other ins 2 + 798 = 800.

---

1956.208 1 m. W. of Orion, Major  
Co., Oklahoma. IX. 19. 1956. (R.)  
Elev. approx. 1500 ft.

Old corn field, largely grown up in  
sunflowers - soil sandy loam.



Spharagnum on ground surf.

Hadrotettix ditto, 2 seen, 1 taken

Mel. packardii a few, 2 taken.

Oecanthus all swept from sunflowers.

Orth.  $18 + 4082 = 4100$ .

Other ins.  $6 + 800 = 806$  ✓

---

1956. 209 5.5 ms. N. of Fairview,  
<sup>Major</sup> ~~Deer~~ Co, Oklahoma. IX. 19. 1956. (R.)

Elev (alt. in.) 1150 ft.

Roadside - ~~road~~ mowed grass & weeds,  
with areas since grown up in sunflowers.

Hippiscus, 1 - all seen - taken on roadway.

Desmottettix speciosus 1 - all seen.

Mel. vittatus a few - 1 taken

" diff. num., 2 taken.

" flavipes type 2 taken, others seen.

Oecanthus swept from sunflowers -

Orth.  $14 + 4100 = 4114$ ,

Other ins  $5 + 806 = 811$  ✓

---



1956. 210 7.4 ms. E. of Cleo Springs,  
Major Co., Oklahoma. IX, 19, 1956. (R.)  
Elev. (altim.) 1200 ft.

Roadside Tall weeds, partly *Trinella*-  
weed - ~~sp~~ *Sandspur* - in dry drain,  
some sandy tilt areas.

*Agrostoides* on ground.

*Sphragnum* on road edge.

*Mel.* "*flavides*" type a few

" *femur-nigrum* ? 1 taken

" *nux.* ? 1 taken

" "*quadratus* ?" 1 taken

" *viridatus* 1 taken.

*Oenanthus* beaten from weed.

Orth. 17 + 414 = 431.

Utherian 1 + 811 = 812. ✓

---

1956. 211 2 ms E. of Pond Creek, Grant Co.,  
Oklahoma. IX, 20, 1956. (R.) Elev.  
(altim.) 850 feet. Wind very high

Roadside dry ditch, with tall grass, *Trinella* weed,  
*Sandspur*, etc.

*Sphragnum* *nux.* + *virid.* on bare  
ground.



Agelaius, on ground.

Mel. appar. 3 species. Numerous.

Coccyzus - nupt.

Orth. 26 + 4131 = 4157.

Other ins. 0 + 812 = 812. ✓

---

1956. 212 4 ms. E. of Tonkawa, Kay Co.,  
Oklahoma. 1X. 20. 1956. (R.) Elev (altim.)  
750 feet.

Wind high!

Roadside, mowed but partially  
grown up.

Mermis few, 1 pair taken

Trachyrhynchus few, 2 taken, roadside.

Hippiscus a number, road edge, 3 taken.

Agelaius a number, on ground.

Mel. diff. numer., sev. taken.

" pachardi 1 taken, all range.

" mel. numerous.

Scolecophagus 1 juv. nupt.

Conocephalus 1 ♂ nupt.

Coccyzus num., nupt.

Orth. 30 + 4157 = 4187.

Other ins. 0 + 812 = 812. ✓

---



1956. 213 11 ms. E. of Ponca City,  
Osage Co., Oklahoma. 1X, 20, 1956.

(R.). Elev. (altim.) 850 feet. Wind high.  
Roadside vegetation, chiefly weeds,  
bordering oak thickets.

Agrostis num. on ground.

Mimosa tw., 1 ♀ taken.

Trachypachis 1 ♀ taken, on ground.

Mel. sp. num., both sexes taken.

Nemophila. 1 ♀ swept from weeds.

Urch.  $15 + 4187 = 4202$ .

Other vis.  $3 + 812 = 815$ . ✓

---

1956 214 6 ms. W. of Pawhuska,  
Osage Co., Oklahoma. 1X. 20. 1956 (R.)

Elev. (altim.) 850 feet. Wind high.

Open plains condition (range land). Roadside  
work. Everything recogn. was taken except  
1 Hemiteles lost.

Synaldis a few, 1 ♂, 2 ♀ taken.

Cyrtolabus num., small ones taken.

Agrostis on ground.

Hippodamia a few, 1 ♂ taken.

Mel sp ? 1 ♀ taken.

Clematis 1 swept.



$$\text{Orth. } 19 + 4202 = 4221, \checkmark$$

$$\text{Orth. in } 0 + 815 = 815. \checkmark$$

1956. 215 ~~215~~ Coodys Bluff, E. side  
of Verdugos Rim, Nowata Co., Okla.

IX. 20, 1956 (R.). Elev. (check 1954  
notes) 7000 ft.

Roadside + steep cut bank covered  
with dead or dried weeds + grasses

All species known taken esp. Hadrotettix.

Agrostettix on ground.

Aupha juv. " "

Campylacantha viridis numerous.

Mel. diff. a few, 1 taken

" Britt. " " 1 "

" mex. numerous.

Urananthus nupt.

$$\text{Orth. } 20 + 4221 = 4241. \checkmark$$

$$\text{Orth. in } 0 + 815 = 815$$



Santa Lucia Mts.

1957. 1 Hastings Wild Life Reservation, Monterey  
Co., Cal. Aug. 29. 1957. (R.) Elev. 1700 ft.

Flat grass and very moist ground close  
to the Pinedale house. Melanophus despectata  
the most numerous species. Mel. lignescens  
type, a few, local. Perisoreia thamnos  
1 ad. + 1 juv. near border of oak woods, but  
not in latter. Oenanthe sp. 1 swept under  
edge of oak woods. Nothing beaten out  
of oak.

U. = 25

Water no. = 4

---

1957. 2 Same tr. as 1957. 1 but VIII. 30. 1957.  
(R.).

Essentially the same conditions as 1957. 2  
with more spots bare blackish earth, more tall  
oak grass and small piece of border under  
oaks.

Melanophus des. far and away the most num.  
species, in all subenvironments, broad  
range of color forms and size in the  
population. Mel. lignescens type, a few,  
scattered. Edalmonia enigma very local,  
not numerous. Edal. smaller species,  
very few, apparently just coming adults,  
equally local. Hisioctia red-winged,



1 ♀, all seen, close to ground under low corn  
Chimerocephala very small juvs. Cheanthus  
both in open low corn and under the  
edge of oak stands. Perlossa thannogaea  
1 ad. ♂ 1 ad. ♀, all noticed, taken well apart  
from one another. Myrmotettix sp. w. 1 ♂  
mupt, all seen.

Orth.  $68 + 25 = 93$ .

Other vis.  $10 + 4 = 14$ .

---

1957.3 Same as 1957.1 but Aug. 30 PM.

(R.). Same area as covered in 1957.1 and  
1957.2.

Melanophus dorsatus found - abundant,  
many color types.

Melanophus tignatus type. Local in sev.  
spots, in both tall oat grass, short grass -  
on bare spots of black soil.

Cedalonotus exiguus. A very few in  
the same small area, with sedges,  
butter-like ground hugging mullen-  
like, bluish white plants.

Perlossa thannogaea. A single male ♀.

Trim. frontana. A single one seen - taken.

Cheanthus. 1 mupt.

Juv. oxyptilids. No. mupt

Orth.  $41 + 93 = 134$ .

Other vis.  $9 + 14 = 23$ .

---



1957. 4 Hastings Wild Life Reservation, Monterey  
Co., Cal. Elev. 1200 - 1800 feet. Aug. 31, 1957 (13)

Worked on slopes to NW. of The Hinsdale home first,  
then below the house, where I have worked the last  
two days. The former was chiefly badly eroded  
slopes, often nearly bare or with very sparse cover  
or in part tall grass cut grass. Almost nothing  
there except M. dermatata. The other situation  
was the lower elevation, tall cut grass, with  
bare patches and much of the low mullen like  
plant. M. dermatata abundant in both  
areas. Oedalon. virgata 1 seen & lost at  
upper station, 3 taken at lower, but one  
other seen & lost there - always on ground or  
low ground cover, a croucher, hence often  
passed over. Oedalon other sp. - one female -  
all virgin. - at lower station. Proctos.  
one seen but escaped, 1 juv. taken at lower  
station. Blisotrichia red. wing - one at  
upper station, all seen. Chiropleura a single  
female taken from low cover under tall  
grass, just below house.

Arct. 15 + 134 = 149.

Other vis. 1 + 23 = 24.



1957.5 Same general areas, above below  
Hindale's house. Aug. 31, 1957. PM.

In tall grass, in two <sup>grass</sup> corn and on  
virtually bare black caliche soil.

Mel. dorsator general & common.

" th. w. sp. (lipneches sp.) a very few,  
quite local.

Cedalonotus unigena very local, in  
areas without tall oat grass. Not numerous.

Blissotia red-wing. But one seen &  
taken - up the slope from the house.

Psittocosa thamnozaca 1 ♂ taken, all  
uniquely.

Chrysomela. 1 ♂ taken in thick but low  
ground.  
" corn above the house - all seen.

Orth.  $13 + 149 = 162$ .

Orth.  $0 + 24 = 24$ .

---

1957.6 Hastings Wild Life Reservation, Santa  
Lena Mts., Monterey Co., Cal. 1700-1750 ft.

Sept. 1, 1957. (R.) House Madrone  
canyon.

In woods above the Hindale's home. Chiefly  
wooded with various oaks and sycamores.

A few patches of grass here and there, a heavy  
carpet of dead oak leaves, tall oat grass  
intrusion here & there.



Procto Psolocera thamnogaea 1 Taken, one other  
lost, on dead oaks under oaks, but in sunny  
spot.

Blisteria "venusta" 1 ♀, ~~not~~ one other lost, in  
spot of relatively bare earth near barn.

Trinotropis frontana 1 ♀ - black phase - in  
heavy shade under oaks - no charcoal area  
near and no sign of old tunneling.

Mel. devastata - a few in patches of tall  
grass intrusion from adjoining open land.

Mel. lyridus pup. Not uncommon under  
the oaks, often on dead oak leaves. Very  
active - elusive.

Orth. 14 + 162 = 176.

Orth. in. ~~24~~ + 24 = ~~24~~ 25.

---

1957.7 Same locality but elev. 1700-1800 ft  
Sept. 2, 1957. Low divide which dirt  
road crosses on way back to Carmel  
Valley. Considerable area of chamise  
mixed with low oak, and open hill  
slopes with oat grass and other patches  
of much lower ground cover. Very little  
exc. M. devastata. Hot, work exhausting.  
Nothing found in chamise.  
M. devastata very numerous chiefly in the  
open areas!



M. lignicolus group. sev. seen, one taken,  
near the border of fallen growth and  
in one case shaded by tall oaks.

Porosoma thomomys sev. seen, one taken, in  
widely separated spots. Not at all common,  
chiefly near its western limit.

Crematogaster sp. 1 ♀ swept.

Alt. 6 + 176 = 182.

Alt. inv. 3 + 25 = 28.

---

1957. 8 Hastings Wild Life Reservation, Monterey  
Co., Cal. Elev. 1750 - 1850 ft. Apt. 2, 1957.  
(R.).

Area worked across the saddle to the SE. of  
the Hinsdale home to the homestead <sup>(Melin Ranch)</sup> on the  
west hollow. Work along road, chiefly in bare  
spots.

Camponotus, a single ind. taken in short grass along  
road - all recognized.

Trinervotropis sp. A single male near to road.

Mel. deserticola many, a few taken.

" lignicolus group - several, not frequent.

Uedalimotus insignis - a single one in  
road grass

Ulex sp. A few, others lost.

Blissus umata umata, active, varied  
in the trees.



1957.8 (cont.)

Uranthus, a few nupt.

Uth. 21 + 182 = 203.

Uth. in. 1 + 28 = 29.

1957.9 Same loc. Sept. 3, 1957. Elev. 1700 ft. (R.)

Look down in the tall oat grass, and lower corn and bean spots below the Suisdale home and the Harris house. Quite warm. Nothing unrecognized was not collected.

Psolocesa thomogara sev. seen, one taken, only in bean spots, most active.

Blissotia univitta A few seen, one taken, only on bean ground.

<sup>Chrysomelids, 1 juv. nupt.</sup>  
Mel. arctata everywhere in plant corn in the grove, all sizes and many color type types.

Mel. lignosus pup. Very local, and then relatively numerous. No explanation could be suggested for the localization, as it did not seem to be correlated with particular corn, although much less frequent in the tall sun-dried oat grass. Very active.

Uedal. caesia, A few, local - <sup>often taken</sup> two taken

" indivisa sp. Local, not numerous - <sup>often taken</sup> two taken  
Chrysomelids 1 ♀ taken in tall grass, at root of  
Chrysomelids - long chase to get it.

Uranthus. From nupt. 1 juv. 3 ads.

Uth 45 + 203 = 248.

Uth. in. 0 + 29 = 29.



1957. 10. Top of divide (<sup>Sierra de</sup> Salinas) above  
Nastings Reservation, Monterey Co. Cal.

Elev. 2500ft Sept. 3, 1957. (R.)

Tall grass under <sup>open</sup> oak cover - cattle grazed  
but grass long. Wonderful view over Salinas  
valley. Very few C.

*Perdorella thammogaea* one seen - lost.

*Cedrel. cingula* a very few, two taken in  
grass.

*Chamaemyphala* juv. 1 taken.

Ueth.  $3 + 248 = 251$ .

Ueth. vis.  $0 + 29 = 29$ .

---

1957. 11 West side of same divide at  
2100 feet. Sept. 3, 1957. (R.)

Oak & pine forest with open grass land  
patches. Found nothing in pines, beating  
produced nothing from the oaks. Grass  
areas netted only 1 *Perdorella th.*, and  
two female *Cedrelomimus cresson. species*.

Ueth.  $3 + 251 = 254$ .

Ueth. vis.  $2 + 29 = 31$ .

---



1957.12 Same as 1957.9 but Sept. 4, 1957.

Mel. dorsata numerous as usual.

Cedat. cupina A few - all recognizable. Taken.

Himantia venusta A very few - not taken.

Peronos. thamnogeton One male taken, a few escaped, but only a few seen.

Catch.  $14 + 254 = 268$ .

Other vis.  $0 + 31 = 31$ .

---

1957.13, Along Tularcitos Creek,  
Carmel Valley, below Tularcitos Ranch,  
Monterey Co., Cal. Elev. approx. 70 feet. Sept. 4, 1957.  
(R.).

Cedalonotus endemic species. Single one  
along edge of tall woodland near Creek.

Catch.  $268 + 1 = 269$ .

Other vis.  $0 + 31 = 31$ .

---

1957.14 Point Lobos, Monterey Co., Cal.

Elev. circa 75 feet. Sept. 4, 1957. (R.)

In low corn, chiefly tall grass, in open.

just above beach and beach rocks. Shallow. Few C.

Juv. Argem. 1 taken.

Mel. dorsata a few, not numerous.

Uca a number swept.

Catch.  $10 + 269 = 279$ .

Other vis.  $0 + 31 = 31$

---



1957.15 As 1957.8 but all on Hastings side  
of fence. Elev. 1700-1775 ft. Sept. 6, 1957. (R.)  
Along road, partly in open, partly under  
oaks, some bare areas, mostly tall oak forest.

Sw. juv. Aeghina scripta.

Histiogaster venusta - locally on the bare  
spots. In sunlight.

Cidalciontus indensis speciosus. One ♀,  
all unrecognized. Under oak shade.

Mel. decoloratus - Not frequent, too shaded.

" ligusticus sp. A few, generally in  
the shaded sections, under oaks.

Scutellaria 1 scripta.  
Scutellaria 1 juv. scripta.

Uth. 20 + 279 = 299.

Uth. ins. 4 + 31 = 35.

---

1957.16 On Melin Ranch adjoining Hastings  
Reservation to the eastward. Elev. about 1900  
feet. Sept. 5, 1957. (R.)

Open oak grass slopes with numerous bare  
or nearly bare spots.

Psilocybe thamnospora a few, very active, one  
taken, general.

Histiogaster venusta locally numerous in bare  
spots.

Conocybe sp. A single ♀ taken. No others recogn.



1957.16 (cont.)

Adelomachus eugenia 1♂, all seen, in three spots,  
" endumin. sp. juv. ♀, in separate  
spots, same areas.

Mel. dissectata numerous.

Trim. albescens One small colony, very local,  
on bare ground.

Uth.  $20 + 299 = 319$ .

Other ins.  $3 + 35 = 38$

---

1957.17 Same as 1957.1 but Sept. 5, 1957. (R.).

very little D.

juv. Asp. 1 swept.  
Mel. dissectata a number - no. taken.

Mel. lignosus type. juv. two taken, less rather  
near the border of oak stands.

Chalcid. univittata 1♀ taken, all seen.

Oecanthus 1 juv. taken from oak overhang.

Uth.  $7 + 319 = 326$ .

Other ins.  $7 + 38 = 45$ .

---

1957.18 As 1957.6 but reaching higher, probably

to 1800 feet. Sept. 6, 1957. (R.) Madonna

Narrow trail along steep side of Canyon.  
patch, opening out at times into small  
flats. Slopes and gulch bottom timbered,  
chiefly oak, some oecanthus. General  
cover with tall oak grass intrusions from



The nearby slopes on low thin grass mixed with a varied ground carpet, pavement often dead oak leaves. Both scarce and very local.

Psolocosa thamnogaea Sw. lost, not taken. Very local, on ground, usually the bare spots.

Mel. desertator A few, in the same open spots, apparently intrusion from the nearby grassy slopes.

Mel. lignicolus sp. In small colonies, local, here not in the tall oat grass, but in the <sup>shorter</sup> grass and mixed vegetation. Very active. Numerous color phases.

Sordaria mus. 1 ♂ swept along trail.

Oecanthus 2 juvs. swept.

$$\text{Orth. } 25 + 326 = 351$$

$$\text{Leth. ins. } 7 + 45 = 52$$

1957. 19 Same as 1957. 1 but Sept. 6, 1957 (R.)  
very hot. 107°.

Psolocosa thamnogaea Scarce - 3 taken.

Mel. desertator Everywhere in great abundance.

" lignicolus sp. A few, not numerous - 3 taken.

Cleidal. unguis Few. 2 ♂ 1 ♀ taken, very few others seen.

Cleidal. undecim sp. 1 ♂ 1 ♀ taken separately  
all seen.



1957.19 (cont.)

Chiroplura 1 ♀ taken from ground in tall  
grass - all seen.

Crematogaster 1 ♀ swept.

Length.  $18 + 351 = 369$ .

Wing.  $9 + 45 = 54$ .

1957.20 Hastings Natural History Reservation,  
Monterey Co., Cal. Elev. <sup>1650</sup> 1700 feet. Sept. 7, 1957.  
(R.).

Work was done in areas near the road in  
below the station. Along dirt road, bordering  
vegetation and areas of tall oat grass and  
there were bare blackish earth with little  
plant cover.

Pitandria 1 juv. running on almost bare black  
Trim. pallid. 1 on dirt road surface, all seen  
here so far.

Chiropt. venusta several on ditto.

Mel. desertator swarming. Difficult to  
find other species on account of the  
great abundance of this.

Mel. lignosus group. ~~Two~~ One ♀, all  
seen.

Udalavertis enigma. Local on bare spots -  
not common, the ones taken most consid. search.

Crematogaster sev. swept - one from overhanging  
ledge.  
Length.  $27 + 369 = 396$ .  
Wing.  $6 + 54 = 60$ .



1957. 21 Same locality, 1700 ft. but 1X. P. 1957  
(R.)

Work done between the road cut and the pump house to the W. of the road. Very large in out-grass (Bromus & another genus) in more open bare spots, in a few rocky masses (nothing there) and in ground cover under live oaks. Very few C. except M. deusta.

Helicostema var. A very few, in bare spots. One taken on surface of dirt road.

Trin. fontana like on surface of dirt road, all com.

Mel. Annotata general, but more particularly in open.

Mel. lignosus group. One small colony in dead oak leaves, dead grass and bank trash in shade under giant live oak.

Clinopium 1 ♂ in tall grass in open, all com.

Ceanothus. Av. hapt.

$$\text{leath } 15 + 396 = 411.$$

$$\text{leath } 7 + 60 = 67.$$

---



1957.22 Same locality, 1700-1800 feet.

IX. 8. 1957 (R.) The hill slopes to the west above the Hastings cottage. A few large oaks, several areas of low tangles brush but mostly tall grass. Very few Q. exc. M. devastator.

M. devastator, numerous, but not as abundant as in the grass areas about the house.

Pitaneutria 1 ad. ♀ running on the ground.

Lindberia 1 ♀, pale pinkish straw color - swept in grass.

Orth. 3 + 411 = 414

Other ins. 0 + 67 = 67

---

1957.23 Same area as 1957.8, same characteristics. Sept. 9, 1957. (R.).

Enfleuria in thorn in Linddale house.

Pitaneutria ♀ running on ground in low cover.

Psoloea few, scattered, 1 taken, in some areas.

Conozoa a few, in one relatively bare spot on the Main Ranch lands.

Microtus var. rather general, but more particularly in the more sandy stretches of road.



~~the~~ Trinistropis fontana 1♀ on trail along edge  
of wooded section.

Trin. altissima 2♀♀ in the relatively  
bare area where ♂♂ of the species were taken  
on Sept. 2. Sw. others seen, but no ♂♂.

Trin. hostilis 1♀ ~~is~~ along the shrubby border  
of the road down through the glen. All  
recognized. No change near.

Cedrel. virgata a few in same bare area  
where taken on Sept. 2.

Cedrel. adum. spec. 1♂ taken in the wooded  
glen - 1♀ lost.

Succinea 1♀ in tall grass just beyond  
house - mpt.

Cedantus sp. mpt in tall grass.

Arth.  $32 + 414 = 446$ .

Other was  $6 + 67 = 73$ .

---

1957. 24 As 1957. 2 but Sept. 9, 1957. (R.)

Assiduous work in area where corn was  
thinner and more dry blackish earth  
exposed.

Polioptila thamnogaea A limited  
number seen, a ♂ & a ♀ taken separately.  
A very illusive species.

Melanophus devastator Everywhere, all  
ages and coloration. A new taken.



1957.24 (cont.)

Oedalonotus enigma. Very local, sticking close to the ground, apparently hiding - when not jumping, among root stalks. A powerful jumper and very capable of eluding a net, particularly the males.

Oedalonotus endemic species. A single female taken. All seen.

Orth.  $22 + 446 = 468$ .

Orth. vis.  $0 + 73 = 73$ .

---

1957. 25 Madrona Canyon, Hastings Natural History Reservation, Monterey Co., Cal. Sept. 10, 1957.  
Elev. 1700-1850 feet. (R.).

Melanophus dorsatus local, in many places on flats particularly.

Mel. lignicolor pup. Very local, but sometimes numerous in a small area. Generally in areas with many dead oak leaves, and always on the ground cover.

Psolocera. A few, scattered.

Hisrosteria var. Very local, in many spots, usually sandy ones.

Trini. fontana A single one taken.

Sordidina A ~~few~~ juv. impt.

Orth.  $44 + 468 = 512$ .

Orth. vis.  $1 + 73 = 74$ .

---



1957. 26 Sierra ~~de~~ de Salinas, Monterey  
Co., Cal. West side to top of divide. Elev.  
btw. 4000 in head of Bear Canyon (windmill  
and top of Palo Escrito Peak, 4465' (survey  
mark). Sept. 10, 1957. (R.).

The upper slopes of the Sierra de Salinas  
is rather thickly wooded chiefly with oak,  
many large, interspersed as single  
trees in clumps in grassland. Conditions  
of course not markedly different from  
those of 1700-1900 feet but less tangles  
and more open prairie. *Urtica* not abundant.

Mel. dermatata a very few.

Microtus pennsylvanicus Most numerous,  
on bare patches, as lower down, very  
many.

Trilob. frontalis One at 4465'.

Camus a small colony, only at 4465'.

*Urtica*. 13 + 512 = 525.

*Urtica* var. 6 + 74 = 80.

---

1957. 27 Trueta Ranch, Robertson  
Creek, Monterey Co., Cal. Elev. 2500 ft.

1X. 10. 1957. (~~R.~~) (Jean Lewis Dale).

Unfound by rough house.

Uedalemonia endem. species.

*Urtica*. 1 + 525 = 526.

*Urtica* var. 0 + 80 = 80



1957.28 (1957.100A) Southwestern Research  
Station, Can Creek, Chiricahua Mts., Cochise Co.,  
Arizona. Elev. 5400 ft. Sept. 15, 1957. (R.).

Worked for quarter mile above station in main  
canyon, chiefly in or near wash, much in shade  
of oak, juniper + sycamores.

Stegomyia ♂ in screen of house in morning.  
Psolocassa<sup>Fea.</sup> 1 under oak in ground litter, all seen.

Trim. pallidip. 1 ♂ under oaks, unusual habitat,  
all seen.

Trim. red legged. 1 ♀ under oaks, all seen.

Metathymus plattei rubripennis. 1 ♂ in shade  
along wash.

Heliothis bryantini. Relatively common  
in and near wash.

Melanophus californicus. Very few adults, in  
more sunny spots.

Melanophus desertinus. 1 ♀, all seen.

Conalcea huachucae. Local, in shade,  
on ground, chiefly on or among dead oak  
leaves. No males seen.

Orth. 31 + 525 = 556

Orth. ins. 8 + 80 = 88.

---



1957.29 (1957.100B) Same area as 1957.28  
but extending up canyon to first road  
bridge. Elev. 5400 - 5500 ft. Sept. 15, 1957.  
(R.).

Same general conditions as 1957.28.

Stagmomantis limbata 1♀ in grass under  
oaks and junipers.

Psolocosa 1♀ in dead oak leaves - all seen.

Aphid. Sw. pairs on ground in shade.

Metobryna plattei rubripennis. 1♀. Same area.

Helicostes benjamini. Same type of  
habitat as for 1957.28.

Melanoplus laticornis. Few adults, one long-  
winged, plus juvs., usually in grassy and  
sunny spots.

Conabasca huachucae. Local, numerous,  
usually seen in dead oak leaves. A few  
males taken. Very active.

$$\text{Orth. } 38 + 556 = 594.$$

$$\text{Orth. vis. } 10 + 88 = 98.$$

---



1957.30 (1957.101A). Same loc. as  
1957.28 + 1957.29 but Sept. 16. 1957. (R.)

Wk done along road and in adjacent corn  
on N. side of road, down first road bridge  
below station. (ab. 1/2 m.)

Trimastix red-leg. One on stony soil.

Mesochorus plattii rubripennis. A few  
under oaks and junipers and one on roadbed.

Neiastus benjamini. Scattered. One both  
roadbed and on adjacent stony soil.

Conalcaea huachuana. Sw. seen on

stony soil under tree corn. One taken.

Melanophus cakeris Abundant. A few  
long-winged. Juv. numerous.

Md. differentialis. One taken in station  
and patch.

Urch.  $43 + 594 = 637$

Urch. ins.  $10 + 98 = 108$

---

1957.31 (1957.101B). Same as 1957.29.  
but Sept. 16. 1957. (R.)

Yersinia two running on ground in open  
grass under trees.

Proctos Ter. 1♀. In shade under trees.

Arphia Sw. juv. on ground.

Trimastix blue-winged. 1♀ on edge of  
stony wash



Conalencia huachuana. Local in moderate numbers. Not restricted to dead oak leaves, but always in shaded areas.

Colth.  $22 + 637 = 659$ .

Other ins.  $2 + 108 = 110$ .

---

1957.3 (1957.102A) <sup>Same loc. but in Station</sup> ~~Same loc. as 1957.31~~ <sup>540 sp. 2.</sup>

Sept. 17. 1957. (R) Along road surface and in shady areas within station grounds about cottages and between house and laboratory.

Stegomyia 10 kept from Fall under.

Trich. pallidipennis. A few, one taken.

Wierst. lachia. A number, sev. taken.

Empoza carnata Abundant, great imitation in color true of ♀♀. Chiefly on dusty road surface.

Trachyphasis kinrossi. A fair number, well distributed, on road surface.

Melanophus labialis. Very common in Fall under, many immatures.

Colth.  $91 + 659 = 750$ .

Other ins.  $3 + 110 = 113$ .

---



1957. 33. Southwestern Research Station,  
Can Creek, Chiricahua Mts., Cochise Co.,  
Arizona. Sept. 17, 1957. 5400 ft. (R.)  
Work in the low meadowy spot near the  
spring, and largely under willows, where  
I worked in 1956.

Paratettix locally common. Both adults  
& juvs. Less prevalent in the wetter spots  
than Tettigidea.

Tettigidea more localized than  
Paratettix, as I had previously noted.

Both ads. & juvs. Prone to be in the wetter  
section.

Elisosterna carolina. Numerous  
in sunny spots, even when damp.  
Performed an aerial dance suggesting  
Aeroboreutes but not rising more  
than 15 feet or so from the ground. I  
had never seen the species do this previously.  
Conalanea A single ♀ in grass  
under the willows. An unusual  
site for the species.

Nemobius juvs. swept.

leth.  $118 + 750 = 868$ .

leth. ins.  $4 + 113 = 117$ .



1957.34 1 m. below Portal, Cochise Co., Arizona.

Elev. (<sup>about</sup> ~~1000~~) 4600 ft. Sept. 18, 1957. (R.)

Upper brush country, with much mesquite, some acacia, a great deal of tumble weed, no cactus or sotillo, a little Kochelisia, and a limited amount of grass. Numerous strong small shallow washes.

No great variety of Coleoptera.

Trin. pallidip. Abundant, general.

" red-leg. Few, very local.

Cibolarius aridus The only one taken was the only one seen. On strong soil.

Brachystro. furcata, abundant, mating, apparently taking refuge in the dense mats at the base of mesquite clumps. Active. Many on road. The ♀♀ can bite very definitely when held.

No jms. seen.

Mel. laticornis A very few. One long-winged ind. taken.

Haptoglossa rather general, but not common. Apparently they seem to take refuge in the green tumble weed.

Catch.  $42 + 868 = 910$ .

Other spp.  $14 + 117 = 131$ .



1957. 35 As data as 1957. 29 but Sept. 18, 1957.  
(R.).

Arphia. 1 juv. in oak woods.  
Corizoa carinata on road surface in station  
ground.

Helicostes laej. found near rock surfaces,  
but not invariably.

Mel differentialis on road surface in  
station ground, clearly from adjacent  
weed patch.

Conalanea huachucae Local, apparently  
in small colonies. Sometimes out in bright  
sunlight. A few were in cotton. No  
juvs. seen.

Diapheromera 1 ♂ in station ground. Not  
personally collected.

Orth.  $23 + 910 = 933$ .

Other ins.  $1 + 131 = 132$ .

---

1957. 36 Southwestern Research Station, Carr Creek,  
Chiricahua Mts., Cochise Co., Ariz. Elev. 5400 ft -  
5500 ft. Sept. 19, 1957. (R.).

Work done from a short distance above the  
first road bridge above the station back to  
the station, following wooded patches close  
to, or on islands in, the wash.

Arphia. Small juvs at several different  
places. Both in open and under rocks.



Trim. three-winged. One on rocks just above bridge (5500' +), another seen - lost below same.

Helinaestus truj. Local, usually near rocky or stony spots but not restricted to wash.

Conalcaea huachucaeana. Local, in small groups. Usually on or near dead oak leaves under shade of oaks or junipers, but occasionally in open close to the preferred habitat.

Orth.  $32 + 933 = 965$ .

Orth. ins.  $5 + 132 = 137$ .

---

1957.37 Southwestern Research Station, Chinle  
Nts., Cochise Co., Arizona. Elev. 5400-5500 feet.  
Sept. 19, 1957. (R.).

Work was done adjacent to the road branching off to the S.W. at the Station and then back close to the wash above the Station. Open sunny slopes, stony or grassy, and the under oak condition were examined.

Amphisp. juv. at a number of points.

Trim. red-legged. A single ♀ in open stony slope. All seen.

Mutth. plattii subripens. A single female in sunny grassy spot. All seen.



1957.37 (cont.)

Helictes tujamini. A few in more open, usually ~~open~~ sunny spots.

Mel. tahrini. Locally numerous, in more open areas usually, occasionally in shade, generally where there is grass. Numerous juvs. etc. No long-winged ones taken.

Conalaca horachucana. All seemed to be taken near the Can Creek wash just above station.

Conalaca humphreysi. A male and two females taken in several localities along the bank road, always in more open spots than frequented by C. horachucana.

With.  $31 + 965 = 996$ .

Other ins.  $13 + 137 = 150$ .

---

1957.38 Can Creek Canyon, 1 m. below Southwestern Research Station, Chinicahua Mts., Cochise Co., Ariz. Elev. 5300 ft. Sept. 20, 1957. (R.)

Work done in three areas: under oak & juniper; along banks & strand of ~~stream~~ <sup>d. running</sup> ~~tributary~~ <sup>tributary</sup> Can Creek; and in an abandoned alfalfa field bordering oak & juniper woods.

Aopha juv. A few taken in the field.

Conozon carinata. A few in field.

Helictes tujamini. A few along stream bank.



Elissostoma carolina In the old field.

Melanophes laticornis. Very abundant in the old field - a few long winged.

~~Congo~~ Conalcaea luscachurana. A very few in the oak-juniper woods on the ground, but the majority in the old field where it clearly bordered the oak-juniper woods.

Paratettix. A number close to stream.

Ellipes. One ditto.

Stagmomantis limbata 1 ♀ kept in old field

Orth.  $92 + 996 = 1088$ .

Other iss.  $23 + 150 = 173$ .

---

1957.39 As 1957.37 except that all work was done along or adjacent to the Cima Road (that is Terr.). Elev. 5400-5500 ft. Sept. 20, 1957. (R.)

Psolocaea A single one kept on a relatively bare stony slope.

Aphid A number of species, one taken. Barren areas.

Thim. red-legged. A single ♀ seen - taken on stony slope.

Helicostus trispinatus. Rather frequent on more stony areas.

Metatrypa platt rubripennis. Local, on the more stony and more barren slopes. All taken ♀♀, perhaps near end of its annual cycle.



1957.39 (cont.).

Melanophus lachrymans Almost everywhere: A few long-winged ones taken.

Conalcaea humphreysii - Not at all numerous on the sunny stony and thinly grassed slopes. ~~Not~~

C. huachucae. Local, and not as strictly limited to oak areas as I had believed. Local forms taken close to C. humphreysii habitats. I think the ranges of the two (entirely) just touch or narrowly overlap here.

With.  $32 + 1088 = 1120$ .

With no.  $2 + 173 = 175$

---

1957.40 As 1957.28 but Sept. 21, 1957. (R.)

Aspha Sw. juv. in bare spots.

Tomonotus ferrugineus Juv. On litter of <sup>dead</sup> oak leaves under oak & juniper.

Heliastus benjamini A number in bare or rocky spots.

~~Conalcaea~~ Conalcaea huachucae Scattered.

Local. On dead oak leaf litter under oaks & junipers.

Oecanthus sp. 1 juv. swept.

With.  $15 + 1120 = 1135$

With no.  $14 + 175 = 189$ .

---



1957.41 As 1957.33 but carried up the  
bordering south slope a distance into the  
oak - juniper forest. Elev. 5400 - 5500 ft.

Sept. 21, 1957. (R.).

Paratettix mx. Locally abundant in the more  
moist areas, juns. largely predominating.

Tettigidea much less numerous than Paratettix,  
more local than Paratettix - few adult. Probably  
more frequent in the very wet sections.

Chrysosterna car. Quite a few in the  
meadowy spots along the rib. brook.

Melanoplus diff. A few in rank growth  
in meadow.

Conalaca huachucaeana. A few in the lower  
edge of the woodland.

Heliocten bryanini. A few on strong outcrops  
near meadows.

Orth.  $110 + 1135 = 1245$ .

Other ins.  $4 + 189 = 193$ .

---

San Simon Valley, Cochise Co., Arizona.  
1957.42 { 4 mi. S. of Rhodes, N. M. along  
main highway. Elev. 4400 ft. (altimeter)

Sept. 23, 1957. (R.).

Flat of valley with small dry mud flats,  
mesquite, acacia, a few nopal, numerous  
clumps of rabbit weed, scattered tall



1957.42 (cont.)

brush grass and numerous low plants.  
Mind strong.

Opeia 1 ♂ swept, 1 ♀ lost. All seen.

Agrenotithis 1 ♀ swept. All seen.

Chilocara Not common, sometimes on  
dry mud playa-like spots. 4 taken.

Brachetom Not numerous. All ♂♂ seen, taken  
a few ♀♀ lost. Usually in the grassier  
areas.

Aphia pseudonictana. A few seen, one taken,  
long flying.

Trimerotropis pallidip. several.

Trachyrhynchus hirta subsp. Well distributed,  
but more usually on the bare areas.

Brachystola. A few. No ♀♀ seen. Two  
males taken.

Juv. oedipodid. One taken, female?

✓ Paropomala. A very few, in the taller  
grass.

Phortaliotes rubescens. A few.

Mel. regalis Scattered, not numerous.

" labialis Swarming everywhere.

Long and th. w.

$$\text{Uth. } 78 + 1245 = 1323$$

$$\text{Uth. ins. } 14 + 193 = 207.$$



1957.43 Southernmost Research Station, Carr  
Creek Canyon, Chiricahua Mts., Cochise Co., Ariz.  
Elev. 5406 ft. Sept. 24, 1957. (R.)

Within Station grounds, working on mud  
patches, abandoned alfalfa and dirt road  
surfaces.

Trim. pallidip. num. as usual on lower spots.

Trachypachis linna not sp. A few locally on  
bare dirt road.

Coryza carinata Numerous on dirt  
road. 1 juv. Taken also.

Mel. lachrym Abundant in all veg. &  
also scattered over <sup>dirt</sup> road.

Mel. diff. A few in tall grass & abandoned  
alfalfa.

Orth.  $35 + 1323 = 1358$ .

Other ins.  $1 + 207 = 208$ .

---

1957.44 As 1957.39 but Sept. 24, 1957. (R.)

Aphid. 1 juv. only <sup>one seen, one</sup> strong and gravelly slope.

Coryza carinata. A single one in a small  
dry wash.

Helictes benjamini. Small on rocky surface.

Mutobregma plattii rubripennis. Locally  
numerous on gravelly and stony surfaces.

Not at all elusive. Wings both red & yellow.



1957.44 (cont.)

Melanoplus laticornis. Relatively general, where there was any grass or other low vegetation. Some macropterous, very variable in size.

Conalcaea huachuana. Numerous small colony. Apparently more particular about corn than C. humphreysii. More widely distributed than latter.

C. humphreysii. Very local, only in small spots, there more open to the sun, slopes, less corn than where C. huachuana is found.

Acronyctus 18 kept from grass under juniper.

Urch.  $52 + 1358 = 1410.$

Other ins.  $5 + 208 = 213.$

---







1960.

1960. 1. W. side of Rays Hill, 1 m. E. of Breezewort,  
Bedford Co., Penna. Elev. 1750 ft. (altimeter).

VIII. 23. 1960. (R.) Roadside + edge of deciduous  
woodland. little Q. - mostly juvs.

Empidonax 1 ad. ♂ and several immat. ♀ swept from  
border of forest.

Contopus from cut-off roadside ground litter -  
dry. Adults + juvs.

Ampelis 1 immat. swept.

Melanerpes sp. juvs. only.

Orth. 0 + 10 = 10

Other vis. 0 + 10 = 10

1960. 2 E. side of Sidelong Hill, Fulton Co. Pa.  
Elev. (ex top bench mark) 2180 feet. Aug. 23, 1960.

(R.). Roadside and border of deciduous woods  
(chiefly oaks). Slopes very steep - working area  
very limited. Nothing in woodland as far as practical  
to go.

Chrysomitris viridis A few adults

Geothlypis carolina One adult taken and a number  
of others seen.

Melanerpes formicivorus 1 ad. - juvs. Only adult seen.

Empidonax coeruleus 1 in nest preceding nest.

Parus americanus Three adults, both sexes, in low ground  
litter -  
cone.

Orth. 14 + 10 = 24

Other vis 16 + 10 = 26



1960.3. 4 mo. W. of Mc Connellsburg, Fulton  
Co., Penna. (on U.S. 30) Elev. (altimeter) 1325 feet.

Aug. 23, 1960. (R.).

Roadside with grass, shrubby marginal to  
almost completely deciduous woodland (chiefly  
oaks).

*Liaphromus*, very few. swept  
*Thodera* sp. 1 ♀ in instar preceding maturity. Swept  
from roadside foliage.

*Homotettix*, very few juvs. swept.

*Hippiscus* (?) 1 juv. on ground.

*Melanoplus* ~~fuscus~~ *luridus* A very few.

" *hirtatus*, sev. adults seen, 1 taken

*Nemobius*, ~~from - putting~~ a few.  
a few from ground litter.

{ *Leuc - Spharagnum bolli* } Too elusive to get on  
the terrain.  
*hirsutaria* can.

Orth. 24 + 15 = 39.

Orth. vis. 26 + 5 = 31.

1960.4 2 mo. W. of Mc Connellsburg, Fulton Co.,  
Penna. Elev. (altimeter) 1300 feet. VIII. 23, 1960 (R)

Roadside with grasses and border of field of  
clover. Japanese beetles abundant.

*Chortophaga* 1 ad. ♂ • very small juvs.

*Melanoplus fuscus-rubescens* innumerable,  
a few adults

*Mel. hirtatus* a juv. only



1960.4 (cont.)

Nemobius 1 ad. taken

Ceanothus 4 impt.

Unk.  $17 + 39 = 56$ ,

Other us.  $38 + 31 = 69$

---

1960.5 Bald Knob Summit, Allegheny Mts.,  
Bedford-Somerset Co., Pa. Elev (truck mark) 2900 feet  
VIII. 24, 1960 (R.)

Second growth chiefly deciduous forest (largely oak),  
with fire lane cut through along edge of escarpment.  
Areas of sphagnum, much sweet fern, tall grass, etc.  
Chorthippus ad. & juvs. in various stages, chiefly near  
sphagnum.

Hemiteles A few, apparently all juvs.

Melanophus tristatus 1 ad. ♂, sev. others seen.

" spp. 1 ♀ and sev. juvs.

Aspilota appra pulchra 1 ad. 1 ♀.

Sphagnum belli 1 ad. ♀ - another seen.

Microgaster carolin 1 ♀, others seen.

Nemobius A number swept from ground corn.

Unk.  $37 + 56 = 93$ .

Other us.  $4 + 34 = 38$ .

---

1960.6  $\frac{6}{10}$  m. SW of Roxbury, Somerset Co., Pa.

Elev (altim.) 2350 feet. VIII. 24, 1960. (R.)

Roadside grasses, weeds and screen of trees bordering  
cultivated fields. Sweeping chiefly. Everything  
recognized taken. (over)



Chorthippus A few, a single adult taken.

Hlichromyza virides 1 ad. ♀ taken.

Mel. femur-rubrum Few adults.

" viridatus 1 gravid ♀ taken - alt seen

" sp. juv.

Correphalus fasciatus 1 ad. ♀ taken

" sp. juv.

Nemotus A number swept.

Oecanthus Sw. swept.

Orth.  $22 + 93 = 115$ .

Orth. in  $0 + 38 = 38$ .

---

1960.7. Nemotus Summit, 2 ms. S. of Meyersdale,  
Somerset Co., Pa. Elev. (b.m.) 2267 feet. VIII. 24, 1960.  
(R.).

In clover field with grass patches.

~~Orth.~~ Orphulella speciosa a few, both sexes taken.

Hlichromyza, a single ♀ taken.

Melanophus fem.-rubrum. A number, adults & juv.

Correphalus strabus ads. - juv.

Oecanthus a few.

Nemotus one swept from ground cover.

Tetrix 1 swept.

Orth.  $24 + 115 = 139$ .

Orth. in  $7 + 38 = 45$

---



1960.8 U.S. Route 219  $\frac{1}{2}$  m. S. of Perma.-Maryland  
line, Garrett Co., Md. Elev. (altim.) 2600 feet VIII. 24. 1960.  
(R.)

Roadside (with drain) - tall grass and weeds,  
partly mowed, bordering deciduous forest (oaks,  
ash, locust, maples, etc.) - undergr. in forest  
rather open. Nothing at all seen in the woodland,  
although a quarter of an hour was spent searching  
its ground cover and undergrowth.

Tettigidea 1 juv. myst.

Chironomus 1 juv.

Conocéphalus sp. juv.

Urophylloides speciosa 1 juv.

Melanoplus sp. juv.

Hesperotettix carolinensis - a few, one taken

Neuroticus 7 or 8 taken.

Orth. 12 + 139 = 151.

Orth. ins. 2 + 45 = 47

---

1960.9 6 ms. E of Piney Grove, Garrett Co.,  
Md. (on US 40) Elev. (altim.) 2700 feet. VIII. 24. 1960  
(R.)

Roadside woods and edge of clover field, also some  
old road paving. Every species recognized. taken.

Tettigidea 1 juv.

Chorthippus A few adults, also juv.

Urophylloides speciosa. A very few adults - some  
juv.

Conocéphalus 1 juv.

Spharagemon bollii Sev. seen, 1 taken.

Hesperotettix A number seen, 1 taken.



Sundania sp. 2 ad. ♀♀ Taken.

Neurobis a few.

Oecanthus a number taken.

Orth.  $29 + 151 = 180$ .

Orth. ins.  $1 + 47 = 48$ .

1960.10 Top of Allegheny Front, near Hartmansville,  
Mineral Co., West Virginia, Elev. (altim.) 2800 feet.

VIII. 25, 1960 (R.).

In roadside weeds (milkweed, "butter-eggs", daisies,  
wild carrot, blackberries, etc.) Nearly everything swept.

Empidonax 2 juv ♀♀, diff. instans. swept, not  
under forest fringe.

Chondestes a few adults & many juv.

Amphisp. Two very small juv.

Melanophaga sp. juv only.

Neurobis a number swept from low corn on ground.

Oecanthus 1 swept.

Orth.  $22 + 180 = 202$ .

Orth. ins  $6 + 48 = 54$ .

1960.11 Top of Allegheny Front, 3 ms WSW of loc.  
Mineral Co., W. Va.

1960.10 ^ Elev. (altim.) 2650 feet. VIII. 25, 1960. (R)

Roadside border of woodland (chiefly oaks,  
hickory, etc). Tall grass, sweet fern and various  
weeds.



1960.11 (cont.)

Chorthippus few adults, many juvs.

Ampelis very small juvs.

Melanophus formicivorus Few adults + juvs. not  
at all numerous.

Scolecophagus 1 ♂ in tall weeds.

Merula 1 taken

Orth.  $14 + 202 = 216$

Other ins.  $6 + 54 = 60$

---

1960.12 2.5 mo W. of Gorman, Garrett Co., Md.  
Elev. (altim.) 2650 feet. VIII. 25. 1960 (R.)

Roadside bushes and grass

Mel. bairdii 1 ♀, all seen

Merula three seen

Urethra 1 seen

Orth.  $5 + 216 = 221$

Other ins.  $1 + 60 = 61$

---

1960 13 4.5 mo. S of Breedlove, Tucker Co.,  
West Virginia. Elev. approx 2600 feet VIII 25. 1960 (R.)

Roadside area bordering mixed forest on one side,  
scrub cut-over area on the other. Locally wet.

Tettigidea a few, adults + juvs.

Chorthippus A few adults, more many juvs

Conocephalus fasc. Numerous adults, both sexes.

Merula a few

Orth.  $25 + 221 = 246$

Other ins.  $4 + 61 = 65$



1960.14 1/2 m. W. of Thomas, Tucker Co., West Virginia.  
Elev. (altim.) 3000 feet. VIII. 25 1960. (R.).

Roadside and waste fields - tall grass, much  
mud fern, Smilax, <sup>folded</sup> and scattered boggy spots.

Sole O. taken 1 ad.: no. juv. Chorthippus.

$$\text{Orth. } 5 + 246 = 251.$$

$$\text{Orth. vis. } 5 + 65 = 70.$$

---

1960.15 Along Shaver's Run, 6.5 ms. E. of Elkins,  
(at west entrance of Monongahela Nat. Forest #33),  
Randolph Co., West Virginia. Elev. (altim.) 2100  
feet. VIII. 26, 1960. (R.).

Very wet from morning inter. fog. Roadside weeds  
and grasses. Everything recogn. taken except sliders.  
carolin.

Tettigidea 1 from low cover.

Mel. fasciatus-rubrum A few. Both sexes

" mix. atlanticus 1 ♂ same situation.

Succinea 1 ♂ 2 ♀, perhaps two species, in taller growth.

Conus brachy. A few.

$$\text{Orth. } 15 + 251 = 266.$$

$$\text{Orth. vis. } 11 + 70 = 81.$$

---



1960.16 2.4 ms. E. of Alpina, Randolph Co., West Va.  
Alt. (altim.) 3050 feet. VIII. 26. 1960. (R.).

Roadside on mtn. slopes, tall grass, milkweed, wild  
carrot, smilax, etc.

Everything recognized taken.

Tettigidea 1 taken. 1 juv. Tettigidea, from 2

Heterosternus carolina a number, 1 taken.

Conocoryphus sp. a few adults - 1 juv. taken

Oecanthus nigricornis type - sev. swept.

Orth. 7 + 266 = 273.

Other ins 5 + 81 = 86

---

1960.17 1/2 m. E. of Harman, Randolph Co.,  
West Virginia Altitude (altim.) 2500 feet. VIII. 26. 1960  
(R.)

Roadside in open deciduous forest. Everything  
recogn. taken except one Hechromorpha irides ♀ (escaped).

1 juv. Tettigidea

Mel. f. - 2. a few. ♂ & ♀.

" mix. atl. several ♂.

Conocoryphus 1 juv.

~~♂~~ Nesobius a few.

Oecanthus Two species swept.

Orth. 15 + 273 = 288.

Other ins 3 + 86 = 89

---



1960.18 2.3 ms. W. of Harman, Randolph Co.,  
West Virginia. Alt. (altim.) 2600 feet. VIII. 26, 1960  
(R.)

Roadside and old field border with stray alfalfa,  
this fl., ~~the~~ burdock, etc.

Everything recogn. taken exc. 1 Sphragisma belli and  
1 Chorthippus.

Orth. 26 + 288 = 314.

Orth. no. 8 + 89 = 97.

Urophila spumosa 1 ♀.

Mel. fem. - wh. A few, ♂ and ♀ taken.

Conocphalus brevipes Numerous, ad. - juv.  
" strictus " "

Numenius A few.

Scardinius 1 ♀ in taller weeds.

1960.19 Gladys Fork ~~River~~ River crossing of U.S.  
33 E. of Alpena, Randolph Co., West Va.  
Elev (alt) 2750 feet. VIII. 26, 1960. (R.).

Roadside tall grass and weeds, and wood  
road into deciduous forest. Virtually nothing  
along latter. Roadside with tall grass,  
milkweed, wild carrot, smilax, blackberry, etc.  
Lost Sphragisma belli ♀, but everything else taken.



1960.19 (cont.)

Tettigidea larval taken - roadside.

Helichromys 1♂ - roadside.

Mel. femur-rubrum larval ♀ taken.

Conoccephalus brevipennis ~~larva~~ Adult ♀ ♀ taken,

Disasteris carolina. A number <sup>seen</sup>, one taken. roadside.

Nematus From taken.

Uranthus One kept.

Uth.  $14 + 314 = 328$ .

Other ins.  $2 + 97 = 99$

---

1960.20 2.75 ms. W. of Norton, Randolph Co., West Virginia. Elev. (altim.) 2175 feet. VIII.27. 1960. (R.)

Roadside, narrow border of grass and weeds (steep down slopes on either side). Very little Q.

Helichromys 1♀ all seen.

Chama Chortophya sev. juvs. very small.

Mel. femur-rubrum. A few, also juvs.

Conoccephalus 1 juv. taken

Uth.  $9 + 328 = 337$ .

Other ins.  $3 + 99 = 102$ .

---

1960.21

5 ms. SW. of Norton, Randolph Co., West Virginia.

Elev. (altim.) 2500 feet. VIII.27. 1960. (R.)

Roadside and cut-over shoulder along deciduous woods. Everything seen taken.

Nematus sev. juvs.



Alysiidella spicosa A few representatives

Alysiid (?) juv.

Spharagemon holli 1 taken. Another seen.

Melanophus lucidus Three adults, both sexes.

Scederia sp. 1 ♀ taken

Conoclyptus 1 juv. taken

Memobius A few taken.

Uccanthus 1 taken.

Orth.  $24 + 337 = 361$ .

Other ins.  $2 + 102 = 104$ .

---

1960.22 5 ms. E. & S. of Buckhannon,  
Upshur Co., West Virginia. Elev. (alt.) 1725  
ft. VIII 27. 1960. (R.)

Roadside (narrow) along deciduous woodland.  
Very little.

Tetrix 3 juvs. impt

Mel diff. 1 in instar preceding mat.

Conoclyptus livip. 2 ad. ♂♂.

Uccanthus ad. + juv. taken

Orth.  $9 + 361 = 370$

Other ins.  $5 + 104 = 109$

---



1960.23  $\frac{1}{2}$  m E. of Upshur Co. line on U.S. 33,  
Randolph Co., West Virginia. Elev. (alt.) 1900 feet.  
VIII. 27, 1960. (R.)

Roadside in rather heavy deciduous forest with  
rhododendron thickets. Very little seen.

1 juv. Tettigidea

1 Mel. fumus-rubrum ♀.

Crimphales brevipes ♂ & ♀.

Nemobius 2.

Orth.  $6 + 370 = 376$ .

Cetera ins.  $7 + 109 = 116$

---

1960.24 ~~to~~ 1.4 ms. E. of Hannan,  
Randolph Co., West Virginia. Elev. (alt.) 2125  
feet. VIII. 28, 1960. (R.)

Roadside with tall ~~grass~~ growth, largely  
sumac, and milkweed, and adjacent  
abundantly overgrown old quarry. Both  
situations worked. All species recognized  
taken.

Tettigidea sev. juvs.

Chorthippus 1 ♂, 1 ♀ (latter female)

Helicromorpha several ♀♀

Reasostoma carolina Several seen, one taken.

Sphenagnum belli One taken

Melan. fumus-rubrum Numerous.



Melanoplus differtus 1♂ taken, all seen.

Sordidula sp. 1 ad. ♀ - 1 juv. taken

Nemobius - a few.

Oecanthus - sev. taken

Orth.  $22 + 376 = 398$ .

Other ins.  $7 + 116 = 123$ .

---

1960.25 1.5 ms. E. of Pendleton - Randolph Cos.  
line, Pendleton Co., W. Va. Elev. (altim.) 2600 feet.

VIII. 28, 1960. (R.).

Roadside shoulder in gorge. Tall grass,  
wild carrot, poison ivy (everywhere), milkweed,  
some sumac. Everything recognizable. Taken

Nemotettix 1 taken.

Hisrosteira carolina A few, 1 taken.

Mel. diff. 1♂ taken.

" fun.-rub. 1 taken. Sordidula 1 ad. ♀ taken.

Aphid (?) sev. very small juvs.

Nemobius One taken.

Oecanthus sev. taken.

Orth.  $11 + 398 = 409$ .

Other ins.  $3 + 123 = 126$ .

---



1960 26 2 ms. N. of Rionton, Pendleton Co.,  
West Virginia. Elev. (altim.) 1700 feet. VIII. 28. 1960.  
(R.)

Old field and cow pasture. Tall weeds, thistles,  
tall grass in places. Everything recognizable. Taken.

Chloromorphus vindex 1 ♂ Taken.

Hippodamia oculata 2 ♀ Taken - all seen.

Melanoplus f. - r. - r. - r. sev.

Coriphagus stratus 1 ♀ 1 juv.

Neocleis Taken

Cerantus  ~~Taken~~ <sup>Up</sup> Taken.

Ceth. 10 + 409 = 419

Ceth. ins. 1 + 126 = 127

---

1960. 27 4.5 ms. W. of Franklin, Pendleton Co., West  
Virginia. Elev. (altim.) 2200 feet. VIII. 28, 1960 (R.)  
Roadside. Very little. One Saundersia lost.

2 Melan. f. - r. - r. all taken.

Ceth. 2 + 419 = 421.

Ceth. ins. 4 + 127 = 131

---

1960. 28 3.5 ms. E of Franklin, Pendleton Co., West  
Virginia Elev. (altim.) 1975 feet. VIII. 28, 1960. (R.)

Roadside. Very little.

Schistocerca abundant struck by car, still alive when picked  
up.

Chrysomelids 1 juv. ♀ swept.



Mel diff. two ♀♀ taken, all sun.

*Hippocampus*? 1 juv.

Cecanthus lunulatus.

$$\text{length. } 7 + 421 = \text{428, } 428$$

$$\text{Ceteris vis. } 0 + 131 = 131.$$

---

1960. 29 3 ms E. of Brandywine, Pendleton Co.,  
West Virginia. Elev. (alt.) 2200 feet. Aug. 28, 1960.  
(R.)

Roadside and undisturbed wood road. little.

Atlantius on dead leaves along wood road.

Alchomorphus viridis 1♂ - all sun.

Sudderia sp. 1 juv. kept.

$$\text{length. } 3 + 428 = 431.$$

$$\text{Ceteris vis. } 0 + 131 = 131.$$

---

1960. 30 2.5 ms. E of Top of Shenandoah Mtn. (on  
U.S. 33), Rockingham County, Va. Elev. (alt.)  
2650 feet. Aug. 28, 1960 (R)

Steep roadside under forest canopy. little

Arphia? juv.

Phanagrus belli 2 sun, 1 taken.

$$\text{length. } 4 + 431 = 435$$

$$\text{Ceteris vis. } 1 + 131 = 132$$

---



Southern Rodeo Station  
Carr Cr. Canyon, Chiricahua Mts.,  
Cochise Co., Ariz. Elev. 5400 feet.

153

✓

106  
30  
4  
2  
11  
153

~~✓~~ Taken with light at night  
VIII. 6 1961 (Eades)

106 ✓

Along wash above  
station

VIII. 7. 1961 (R.-E)

30 ✓

Taken with light at night  
VIII. 7. 1961 (Eades)

4

9 ms. SW. of Rodeo,  
Cochise Co., Ariz.  
4500 feet (R.-E)  
VIII. 8. 1961.

130 ✓

1 m. SW. of Apache,  
Cochise Co., Ariz.  
4600 ft. ~~W~~ (R.-E)

VIII. 8. 1961  
(R.-E)

79 ✓  
70  
149 (80 ✓)

One half m. E. of Portal,  
Cochise Co., Ariz. 4900 ft.  
VIII 8. 1961. (R.-E)

25 ✓

with  
~~at~~ light at night  
(George Hagg)

8 3 4

Taken with light at night  
VIII. 8. 1961. (Eades)

12 ✓







One-half m. SW. of Apache,  
Cochise Co., Ariz. 4600 ft.  
VIII. 9. 1961  
(Martensen, Lambert & Eades)

20

✓

Barfoot Park, Chiricahua  
Mts., Cochise Co., Arizona. 8100-8400 ft.  
VIII. 10, 1961 (R. & E.)

115

✓

~~at night.~~  
Taken with light  
VIII. 9, 1961. (Eades)

2

1 m. N. of Portal, on  
Galcyville Road, Cochise  
Co., Ariz. 4900-5000 ft  
VIII. 10. 1961. (Eades)  
Taken with light at night.

26

✓

~~at night.~~  
Taken with light  
at night. VIII. 10. 1961 (E.)

3

Along Animas Road 1.9 m.  
E. of junct with U.S. 80,  
Hidalgo Co., N.M. 4100 ft  
VIII. 11. 1961 (R. & E.)

31

✓

Antelope Pass,  
Peloncillo Mts.,  
Hidalgo Co., N.M.  
4400-4600 ft. (R. & E.)  
VIII. 11. 1961.

39

✓

Animas, Hidalgo Co.,  
N.M. 4405 ft VIII. 11. 1961  
(R. & E.)

37

✓

5 m. N. of Douglas, Cochise  
Co., Ariz. VIII 12, 1961. (R. & E.)

45

✓







Nr. Silver Creek, ab. 13 ms. NE  
of Douglas, Cochise Co., Ariz  
4500ft VIII. 12, 1961. (R. E.)

100

✓

VIII 12, 1961.  
(R. E.)

70

✓

San Simon Valley, 7.2 ms. N  
of Portal turnoff, Hidalgo Co.,  
N.M. 4200ft. VIII. 13, 1961. (R. E.)

33

✓

Road pass of U.S 80 through  
northern Peloncillo Mts., 13 ms  
N. of Animas turnoff, Hidalgo  
Co., N.M. 4700-4800ft. ~~the~~  
VIII. 13, 1961. (R. E.)

41

V

Along road S from  
Station. VIII. 14, 1961 (R.)

11

✓

6-8 ms NE. of Douglas,  
Cochise Co., Ariz. VIII. 14, 1961

4

Sloan Ranch, mouth of  
Skeleton Canyon, Peloncillo  
Mts, Hidalgo Co., N.M. 4675ft  
VIII. 14, 1961 (Eades)

38

✓

Lower Skeleton Canyon,  
Peloncillo Canyon at state  
line - Hidalgo Co., N.M. - Cochise  
Co., Ariz 4800ft VIII. 14, 1961 (Eades)

10

✓







1961.

1961.1 Southwestern Res. Station, Carr Creek Canyon,  
Cochise Co, Arizona. VIII 6. 1961. (Eades) At night  
Near light. Heterid. Small gryllid. Lepus sylvaticus ♂.  
Remains in tall weed of station yard, spotted with a flash of  
Stagmomantis lineata 1♀ & pub. 1 juv.

Scudderia sp. 2 ♀

Heiretina can. 1♀

Melanoplus differentialis Abundant - some quite black,  
~~almost all~~ numerous juv.

Conalcaea huachucaeana. Numerous, both sexes. Not  
moving, inactive, apparently at rest from night  
but in muddy field in station, not where I have  
usually found it under oak, etc. (See 4♀  
one not gutted, so the spermatheca would not be  
damaged.) Small size - dry spring result?

Melanoplus desertorum? Taken as C. huachucaeana  
♂ & ♀ Don't look just right for des. but probably is.  
Both. 106.  
Other ins. 0

1961.2 Same area. VIII 7. 1961 (R.-E.)

Look up along main wash above station as far as  
road bridge. Mainly in boulder channel and  
on surface of oak - juniper cover found on both  
sides, very little to be found.



Conallena huachuana 2 nymphs 1 ♂ & ♀. (either juvs, now  
dead with leaves in front of)  
Psolus t. pusilla 1 ♂ 1 ♀ taken. Few seen. in  
wash.

Helicostus bruj. Moderately numerous, local,  
almost entirely in wash. 1 juv. also - taken.

Tommyia fluv. 1 ♂ All seen. In wash.

Trimerotropis strimmar type. Two males, in  
diff. spots among dead oak leaves on ground.

Orth.  $29 + 106 = 135$

Other ins. 1.

---

1961.3 Smithton Res. Station, Ariz

VIII 7, 1961 at night at light

Chaphromera - 1 fly

Orth.  $3 + 135 = 138$

Other ins. 1.

---

1961 4 9 ms. SW of Rodeo, in Cochise Co., Ariz,  
Elev 4500 feet. VIII 8, 1961. (R+E).

Roadside along highway and railroad. Brush grass, Stem  
sp. Scattered mesquite or a few yucca, with bare patches  
where road material had been scraped up.

Heterantria Surpt. apparently on ground surface.

Chaphromera general in brush grass.

Paracanthus Largely in brush grass

Mermiria monoxiana ~~None~~ In brush grass.

✓ Parapromela None in brush grass

Synaldis In brush grass.

Agrostotethus Few on ground.

Lyph pseudometana 1 juv - all seen.



1961.4 (cont.)

Psobesia local on fr. surf.

Endillacus 1 on bare ground

Cnizor carinator Few on bare ground.

Herotoma On bare ground.

Mesthyna A few, same habitat.

Trimerotropis sternalis type. Numerous locally on bare fr.

Hesperotithys Few in composites.

Melanoplus laticornis type. Local, few.

" aridus Num. in bunch grass, other low com.

" long-winged <sup>2 spp.</sup> Few, in low com.

~~Other~~ Cremyodes albifasciata 5 in 1 grass (1 lost) +  
2 others in var. low com.

Cnizor sp. 1 juv. empty.

Brachytola A very few very small juvs.

leth.  $123 + 138 = 261$

leth. var.  $6 + 1 = 7$

---

1961.5 1 ~~mi~~ m. SW. of Apache, Cochise Co., Ariz.

Elev. 4600 ft. (altim.) VIII. 8. 1961. (R.E.)

Roadside US 80 - S.P.R.R. Bunch grass, scattered mesq., some cactus melon plants, some tumble weed, some bare silt where scraped for road material.

Yersiniops. 1 in a clump of bunch grass - seen & captured there.

Stenomacrus, a single one on ground.

Stenomacrus umbata 1 ♀ = 1 juv. in bunch grass.

Mermiria neomex. Rather general but mod. com.

Typhla. A few - in bunch grass areas.



Platynema A few, on ground.  
Cruzia carinata On bank ground. a number.  
Trin. pallidipennis. 1 ad. taken, all negro on bare ground.  
 " Hemura type (?) In bunch grass and on ground.  
Mel. short-winged. Numerous & appar. several species.  
 Rather common.

Conalcaea humphreysi On colony in mesq, & in low-bunch grass.

✓ Paropromela In bunch grass.

$$\text{Orth. } 77 + 261 = 338,$$

$$\text{Orth. no. } 2 + 7 = 9$$


---

1961. 6 1/2 mi E. of Portal, Cochise Co., Arizona.  
 Elev 4900 feet (altim.) VIII. 8. 1961 (R. & E)

Roadside. Bunch grass & much mesquite & rabbit weed.

<sup>Psychoscypha</sup>  
~~Diaphanomeria~~ several except. Adult ♂♂ & juv.

✓ Paropromela Sev. in rabbit weed.

Amphitromus 1 - all seen.

Psolus 1 on pr.

Cibicides 1 on pr. All seen.

Neoprotiter Occur in rabbit weed.

Melan. curvicauda type sev.

" long-winged. One

$$\text{Orth. } 15 + 338 = 353$$

$$\text{Orth. no. } 9$$


---



1961.7 Springers 1961.6  
George Hagg

VIII. 8. 1961.

(~~Edwards~~)

At night.

Arenivora 2♂.

Heteromera 2♂.

Trimerotropis pallidipennis 1♀.

Insara elegans 1♂.

Eremopides juv. 1♂.

With. 7 + 353 = 360

Other ins. 1 + 9 = 10

---

1961.8 Griffiths Research Station, Ariz.,

In unimul. vic. of laboratory building.

VIII 8 1961

(Edwards)

At night

Stagmomantis limbata 1♀. In black locust.

Hiapheromera 1♂, 2 immat. ♀♀. One immat. ♀ of lab.

wall. Other juv. ♀ was hanging beside exuvia in black

locust, ♂ hanging from this female, in this position for

Hoplophrys? 3 ♀. at base of long wall of lab. building.

Microcentrum 3♂, apparently representing two

species. At lab. light.

With. 10 + 360 = 370.

Other ins. 2 + 10 = 12

---



1961.9 Same loc. as 1961.5. VIII. 9. 1961.  
(Martenson, Lambert & Cazier)

In areas of Solanum.

Tropidolophus formosus 7♂, 1 juv. ♀.

Orth.  $8 + 370 = 378$

Orth. ins.  $12 + 0 = 12$

---

1961.10 Barfoot Park, Chiricahua Mts., Cochise  
Co., Arizona. VIII. 10. 1961. Elev. 8100-8400 ft. (R. & E.)

Mountain meadow surrounded by forest of pine & fir, some pine the ponderosa type, the others with a blackish bark, the north facing slope with more fir than the park area, which has an open meadow with tall bunch grass, a wild iris (in seed pods) and patches of a white flowering shrub. David worked up the south-facing slope to 300 feet above the meadow (included in the above figures). This had pine at the base of slope, then oak scrub, then bare talus, then more oak scrub passing into mesquite, yucca, etc. at top, the entire slope covered by loose talus. The <sup>north-</sup> ~~south~~ facing slope had pine with occasional fir, little ground cover except pine needles and occasional open spots. Reached by examination about 200 feet.

Gerrhonotus on rocks with yucca and mesquite.  
Paratrachinus in grassy plant in yucca and mesquite area. Elev. ab. 8400 feet.



1961.10 (cont)

Amphitornus few in iris patches in meadow. 8100 ft.

Chorthippus 1 ♂ + 1 juv. in meadow.

Asphya ? juvs. Meadow - top of ridge to north.

Trimerotropis red-legged. In meadow and town edge of forest, and in clearing in pine forest.

Trimerotropis blue-legged. ♂ on loose rocks mixed with oak scrub on higher part of south-facing slope (8400) & in small clearing in pine forest on N. face slope (approx. 8200 ft).

Trimerotropis yellow-legged. 1 at junction of pine woods & meadow.

Melanoplus approx. aridus group. Juvenal in meadow, slopes wooded and in open spaces.

Melanoplus chiricahuensis ? In meadow, but two taken.

Conalcaea sp. ? More common in grass and mint in oak scrub on slope (8100 - 8400 ft.) Occurring less abundantly along the forest border of the meadow. A few males and most females still juvs.

Centrophilus valgus type. One male under a pine log in meadow, all others were under rocks or in or under decaying wood in pine forest.

Stenopelmatus. Two under pine log in burrows, in meadow. (11 in alcohol)

$$\text{With } 110^v + 378 = 488$$

$$\text{Other was } 5 + 12 = 17$$



1961. 11 Southwest Research Station, Cochise Co., Ariz.  
VIII. 9. 1961. Taken at night, not necessarily attracted to  
light. (Eades)

Conatocaca 1

Nephtosphymus 1

Orth. 2 + 488 = 490

Other ins 0 + 17 = 17

---

1961. 12 1 m. NW. of Portal on ~~the~~ Galeville Road,  
Cochise Co., Ariz. Elev 4900-5000 ft. VIII. 10. 1961. (E.)  
Night work with light. Mosquito predominating, much  
found.

Alispheromus ♂ + juv. ind. [an adult or nearly adult  
female of uncertain spec. pos.] In mosquito.

Stagmomantis 2 juv. in mosquito.

Trimastix strenua type. Found on ground  
" pallid. 1 on ground.

Neotoma 1 ♀ on ground

Nesporotettix ♂ in dead brush grass, ♀ juv. in comp.

Insana elegans 5 in mosquito.

Cremopoda 3 species, all in mosquito.

Gryllus 1 on ground, feeding on oat meal here

Centrophilus 2 ind. " " " " "

Orth. 26 + 490 = 516

Other ins. 0 + 17 = 17

---



1961. 13. Insurrection Research Station, Carr Creek  
Canyon, Cochise Co., Ariz. Elev. 5600 ft. VIII. 10. 1961  
At light at station. (E.)

Microcentrum, Sudderin & brown Eremopoda?

One of each.

Colth.  $3 + 516 = 519$

Other inv.  $0 + 17 = 17$

---

1961. 14 Along Animas road 1.9 ms. E. of junct.  
with U.S. 80, Hidalgo Co., N. M. Elev. 4100 feet.

VIII. 11. 1961. (R-E).

Moist area with total plant cover, much of which was  
fumble weed, scattered bunches of very tall (6 feet) grass.  
This was at the base of a bunch of gravel on which was  
an almost exclusive cover of Larrea.

Rhabdoceratite 1 nearly adult ♀ + sev. juvs., taken  
from Larrea.

Mercuria appar. localized in the tall tufts of  
grass in the <sup>area</sup> ~~moisture~~, males often stridulating. In  
one spot four males were assembled, fanning  
antennae and actively stridulating.

✓ Panopoda 1 in tall grass in moist area.

Syrphula 1 " " " " " "

Trimerotropis Strenua type, one on truck.  
" pallidus, one ditto



Melanophus sp. 1 in tall grass in moist area.

Crux carinata one on bare spts

Distoteneura one on bare ground in wet area

Eucryptolophus two on more moist <sup>in</sup> ground in wet area.

Insara convellae sev. juvs. swept from Larrea

Orth.  $26 + 510 = 542$

Other ins.  $6 + 17 = 23$ .

---

1961. 15 Antelope Pass, Peloncillo Mts., Hidalgo Co., New Mexico Elev. 4400-4600 ft. VIII. 11. 1961 (R-E)

Hill slope below with scattered Larrea, low composites, higher slope <sup>(stony)</sup> with the same composite, also ocotillo, several types of cactus, agave and several junipers.

Stagnomantis juv. swept from Larrea.

Pseudoscorpion a number of males on the low composite on the upper slopes.

✓ Parapronota numerous on the low composite on the <sup>lower</sup> slopes.

Syrphids in same on upper slopes.

Amphitornus Adult - juv. on tree surface.

Trin. pallidip. several, several.

Helicula one on stony ground surface.

Insara convellae 1 juv. swept from Larrea.

Orth  $29 + 542 = 571$ .

Other ins.  $10 + 23 = 33$ .



1961 16 Animas, Hidalgo Co., N. M. Elev. 4405 ft / 6.7  
VIII. 11. 1961.

Rabbit weed, Fumaria weed and other low scrub, with  
some bare ground.

Coryza carinata ♂ & ♀.

Trim. pallidipennis 1

Length, ~~4~~ + 571 = 575

Wing in. 33 + 0 = 33.

---

1961. 17 5 ms. NE. of Douglas, Cochise Co., Arizona.

Along U.S. 80.

VIII. 12. 1961. (R. & E.)

Roadside ditch with very tall grasses and Fumaria weed  
thinning out on margin, some areas of bare red silt.

Syrphula. Local. ♂♂ more numerous than females.  
Three males seen in a single bush, within a few inches of  
one another.

Mermiria adults ♂ & ♀ only, sev. juvs. in preced. instar.

Mistobryza 1 on bare ground.

Trim. pallidipennis numerous on bare ground.

Coryza carinata 3 on bare gr.

Melanoplus luteicornis type. Two adults.

Swarms of immature melanoplids of a number of species.

Proctotrites ? Juvs. taken, fair number.

Taeniopoda Juvs. on roadside in grass.

Helioptera Juvs. swept out of grass.

Length 41 + 575 = 616.

Wing in. 4 + 33 = 37.



1961. 18 Near Silver Creek, about 13 ms. NE. of  
Houglas, Cochise Co., Ariz. Elev. 4500 feet (altim.)  
VIII. 12, 1961 (R.E.)

Roadside with deep but dry ditches with heavy growth  
of beachberry, soft fall bushes, also road edge with short  
- fall grass.

Yersiniopsis on ground

Stegomantis limbata swept from fall grass.

Acantharus 1 juv. on ground.

Mermiria Adults & imm. juvs, chiefly in fall grass.

Boopodon small juv on ground about short grass.

Morseilla ♂♂ only, in bushes & grass. Cactin's

✓ Paropornale imm. in short & fall grass.

Agrotettix Nymphs sweeping.

Arphia 1 juv. on ground.

Conozon carinata on ground.

Taenioptera 1 ad. ♀ in beachberry, just molted.

Brachystola 1 ♀ in insect pruned out in grass.

Conalocera Chiefly in beachberry and seemed to  
be in small groups.

Melanophus longirigid. 1 ad. ♂ in grass.

" Labiatus type. A few adults.

Immense numbers of Arctostola type. In bottom of roadside ditch.  
Innumerable immatures melanopied of a number of species

Whitapetala A few juvs. in short grass.

$$\text{Orth. } 86 + 616 = 702$$

$$\text{Others are } 6 + 37 = 43,$$



1961.19 Same loc. of 1961.5. VIII.12.1961 (Reg.)

Tumble weed and tall grass, short grass, Solanum  
coyote melon patches, Yucca,  
Paratrachinus see script.

Syrphula 1 ♂ in grass.

Mercuria general, but mainly in grass.

Amphitornis in grass.

Agrostotellus script.

Coniza carinata normal in bare area.

Trin. pallidipennis blue on bare gr.

Lepus One female on ground.

Tropidolophus Small series of adults, mostly ♂  
but one ♀ in Solanum areas. local.

Melanoplus discoloris frequent, general even in  
yucca.

Melanoplus laticornis type. normal.

Proctolites? normal.

Series of immatures melanoplids.

Conalcaea humphreysi A number in yucca, and  
occ. in other situations, probably accidental.

Uth.  $68 + 702 = 770$ ,

Uth. ins.  $2 + 43 = 45$ .



1961. 20 San Simon Valley, 7.2 ms. N. (on U.S.  
So) of the Portal turn-off, Hidalgo Co., N.M.  
Elev. 4200 feet. VIII. 13, 1961. (R. & E).

Roadside with drain still muddy from last night's  
rain. Rabbit weed, black brush, larrea, Koeberlinia and  
brush grass, also a few Yucca.

Stagnumantis juv. swept from larrea.

Rhabdoceratites juv. swept from larrea.

Mermiria In brush grass.

✓ Paropromela Merm. in brush grass.

Alpina? juv. swept.

Syrphula In grass.

Psolossa On ground.

Foriatum Two seen, one taken, in black brush.

Trim. pallid. on fr.

Melanophus aridus fr. Simul.

$$\text{Coth } 27 + 770 = 797$$

$$\text{Alth. vis. } 6 + 45 = 51$$

---



1961.21 Road pass of US 80 through northern  
Peloncillo Mts., 13 ms. N. of Animas Turn-off,  
Hidalgo Co., N.M. Elev. 4700-4800 feet. VIII. 13. 1961.  
(R. & E.)

Pass through rugged low rocky ridges, com. varied, more  
evident elements acacia, mesquite, rabbit weed, cholla and  
sopal cactus, harrisa, yucca, bunchgrass, sotol and a  
little ocotillo.

Gysiniops on fr.

Chapheromera juv. swept from harrisa.

Parabacillus several, one in acacia.

Syrphula several, one in acacia.

Uremia in grass.

✓ Paropromela in grass

Psolocera on ground surface.

Trim. pallidip. In wash

1. strenua type. ~~Scarcely~~ General on rocky surfaces.

Rebentia num. but local. Largely on coarse gravel.

Helianta there on white rock surface.

Phrynotettix there on rock wash surface.

Corabaea juv. there in sotol.

Hesperotettix there in rabbit weed, there elsewhere.

Melomophus aridus sp. In acacia.

Orth. 40 + 797 = 837.

Cole. circ. 1 + 51 = 52.



1961.22 Southwestern Research Station, Can Creek  
Canyon, Cochise Co., Ariz. Elev. 5700 ft VIII.14.1961, (R.)  
Along road south from station - area examined  
in 1956 or 1957. Juniper & oak stands on stony  
ground, some areas of open with sparse short grass.  
Very little.

Aphidius 1 juv. on lower area.

Mesoleptus 3 adult ♂♂ and several juvs.  
on stony areas in sun.

Trimerotropis alliciens? An adult pair,  
taken in different spots. Stony areas.

Neohelastus benyi, 1 ad. ♂ + 2 juvs. Stony areas.

No trace of Conakaea previously taken in  
the same immediate area.

Orth. 11 + 837 = 848

Other ins. 0 + 52 = 52

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1961.23 6-8 ms NE of Douglas, Cochise Co., Arizona

Crossing road - Tachinopoda 3 ad. + 1 juv  
VIII.14.1961

Orth. 4 + 848 = 852

Other ins. 0 + 52 = 52

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1961.24 Sloan Ranch, mouth of Shoshone Canyon,  
Pelonville Mts., <sup>Cochise Co., Arizona</sup> ~~Arizona~~ Elev. approx.  
4675  
4700 feet. VIII. 14, 1961 (Eades).

Rocky wash and narrow rocky flood plain. Sycamore  
trees and a few other species of trees along wash. Ground  
reasonably well covered with grass and weeds.

Syrphula in grass & weeds.

Agonotettix ~~1 juv.~~ 2 juvs. same habitat.

Proctos on ground.

Andrena? 1 juv. on ground.

Onychia carinata num. on ground between grass tufts.

Helicostes brimleyi on stony soil, but not in wash.

Crematogaster maculosa 1 ♀ in weeds along side wash

" lumpusii 2 ♂ & ♀ (taken separately) in tall  
grass & weeds under trees

Melomophus luteus type. One in grass & weeds.

" aridus type Two " " "

Orth., 38 + 852 = 890.

Other ins., 0 + 52 = 52

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Peloncillo Mts.  
1961.25 Lower Shilston Canyon, at state line,  
Cochise Co., Ariz. - Hidalgo Co., N.M. Elev. 4800  
ft. VIII.14, 1961. (Eader)

Conditions essentially as at 1961.24 but rats  
more numerous than *Sycanones*.

✓ Paropomata two in grass.

Aulocara ? juv.

Psolocera on ground.

Helicetus on gr. with rocks.

Melanoplus aridus type juv. in tall grass  
+ meads.

Click,  $10 + 890 = 900$ .

Other ins.  $0 + 52 = 52$ .

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